

XX	PA	(DYEC-) UNIV EAST CAROLINA.
XX	PI	Meizger MJ, Nyce JM:
XX	DR	WPI: 1997-051871/05.
XX	PT	Treatment of airway diseases such as asthma - by "officially" identifying
XX	PI	adenoine-free antisense oligonucleotide to airway epithelium of
XX	XX	subject
XX	PS	Claim 5; Page 37; 71pp; English.
XX	CC	A method for treating airway disease in a subject has been produced,
XX	CC	which involves the topical administration of an essential, adenoine-
XX	CC	free antisense oligonucleotide (ON) to the airway epithelium of the
XX	CC	subject. The present sequence is an antisense oligonucleotide.
XX	CC	HSTNFA53 specific for the human tumor necrosis factor alpha. The
XX	CC	method can be used to treat airway diseases such as cystic fibrosis,
XX	CC	asthma, chronic obstructive pulmonary disease, bronchitis and other
XX	CC	airway disease characterized by an inflammatory response. By
XX	CC	eliminating adenoine from the antisense ON, its liberation upon
XX	CC	induced bronchoconstriction is prevented, thereby preventing adenoine
XX	CC	induced bronchoconstriction in patients with hyper reactive airways.
XX	SO	Sequence 28 BP; 0 A; 11 G; 10 C; 7 T; 0 other;
XX	XX	
XX	XX	Query Match 0.84; Score 28; DB 18; Length 28;
XX	XX	Post Local Similarity 100.0%; Prob. No. 0.22;
XX	XX	Matches 28; Conservative 0; Mismatches 0; Indels 0; Gaps 0
XX	QY	846 ccccaatagatgagagagagcccaatgga 873
XX	DB	
XX	DB	28 ccccaatagagagagagagcccaatgga 1
XX	XX	
XX	XX	RESULT 12
XX	1D	AA54533/C
XX	XX	1D AA54533 standard; DNA; 28 BP.
XX	AC	AA54533;
XX	XX	
XX	DT	05-JUL-1999 (first entry)
XX	XX	
XX	DE	Tumour necrosis factor alpha antisense oligonucleotide.
XX	KM	Antisense oligonucleotide, multiple target, antisense treatment;
XX	KM	impaired respiration; inflammation; lung disease;
XX	KM	pulmonary vasoconstriction; inflammation; allergic rhinitis;
XX	KM	acute asthma; allergy; asthma; impeded respiration;
XX	KM	respiratory distress syndrome; pain; cystic fibrosis;
XX	KM	pulmonary hypertension; pulmonary vasoconstriction; emphysema;
XX	KM	chronic obstructive pulmonary disease; leukemia; lymphoma; carcinoma;
XX	KM	colon cancer; breast cancer; lung cancer; pancreatic cancer;
XX	KM	hepatocellular carcinoma; kidney cancer; melanoma; hepatic metastasis;
XX	XX	prostate cancer; ss.
XX	OS	Synthetic.
XX	XX	
XX	PN	W0913886-A1.
XX	XX	
XX	PD	25-MAR-1999.
XX	XX	
XX	PE	17-SEP-1998; 98WO-US19419.
XX	XX	
XX	PR	09-JUN-1998; 98US-0094972.
XX	PR	17-SEP-1997; 97US-0059160.
XX	XX	
XX	PA	(DYEC-) UNIV EAST CAROLINA.
XX	PI	Nyce JM;
XX	XX	

DR	WP1: 1999-221400/19.
XX	
PT	New antisense oligonucleotides used in treatment of, e.g., pulmonary vasorestriction
XX	
PS	Discovered: Page 57; 120pp; English.
XX	
CC	The alternative description of antisense oligonucleotides (AA55272-74) directed against at least 2 targets selected from target genes, coding and non coding regions of RNAs corresponding to target genes, gene initiation regions, genomic flanking regions, intron exon borders, the 5' end, the 3' end and the junction between coding and non coding regions and all segments of RNAs encoding products associated with one or more diseases, conditions or disorders, the antisense oligonucleotides may be derived from sequences AA55272-74. These multiple target oligonucleotides (specifically AA55180-271) can be used for the antisense treatment of diseases and conditions. Typical diseases and conditions are those associated with impaired respiration and inflammation, including lung diseases, pulmonary vasorestriction, inflammation, allergic rhinitis, acute asthma, allergies, asthma, impeded respiration, restricted, obstructive pulmonary disease, emphysema, chronic pulmonary hyperinflation, pulmonary vasorestriction, emphysema, chronic obstructive pulmonary disease, cystic fibrosis, and cancers such as leukemias, lymphomas, carcinomas, endocrine cancer, breast cancer, lung cancer, pancreatic cancer, hepatocellular carcinoma, kidney cancer, melanoma, hepatic metastases, as well as all types of cancers which may metastasize or have metastasized to the lungs, including breast and prostate cancer.
SO	Sequence: 28 BP; 0 A; 11 G; 10 C; 7 T; 0 other;
Query Match:	0.88; Score 28; 108.20; Length 28;
Post Local Similarity:	100.00%; Fred: 0.22;
Matches:	28; Conservation: 0; Mismatches: 0; Indels: 0; Gaps: 0
UY	846 ccccaagaaagaaagaaagcccccagagc 874
Ub	28 ccccaagaaagaaagaaagcccccagagc 1
RESULT: 13	
AA554539/c	
ID	AA554549 standard; 1046; 28 BP.
XX	
AC	AA554549;
XX	
DT	05-JUL-1999 (first entry)
XX	
DE	human adenosine A1 receptor antisense oligonucleotide fragment.
XX	
XX	Antisense oligonucleotide; multiple target; antisense treatment;
KW	impaired respiration; inflammation; lung disease;
KW	pulmonary vasorestriction; inflammation; allergic rhinitis;
KW	acute asthma; allergy; asthma; impeded respiration;
KW	respiratory distress syndrome; pain; cystic fibrosis;
KW	emphysema; hyperinflation; pulmonary vasorestriction; emphysema;
KW	chronic obstructive pulmonary disease; leukemias; lymphomas; carcinoma;
KW	colon cancer; breast cancer; lung cancer; pancreatic cancer;
KW	hepatocellular carcinoma; kidney cancer; melanoma; hepatic metastasis;
XX	prostate cancer; ss.
XX	
OS	Synthetic.
XX	
UN	W0914086-A1.
XX	
FD	25-MAR-1999.
XX	
PP	17-SEP-1998; 98WO-US19419.
XX	
PR	09-JUN-1998; 98US-0094972.
PR	17-SEP-1997; 97DS-0059160.
XX	
ZA	(OVER) UNIV EAST CAROLINA.

XX (CETU) CETUS CORP.
PA
XX
PI Baer BW, Groves ES, Houston LL, Levenson CH,
XX WPL: 1991-132642/18.
DR
XX Conjugates for e.g. AIDS or cancer therapy - has one or more anti-sense oligonucleotide(s) bound to ligand-binding mol., recognising
PT cell surface molecule
XX
PS Claim 18; page 33; 50pp; English.
CC
XX The anti-sense oligonucleotide is complementary to TNF mRNA. It is
CC conjugated to a cell surface ligand-binding molecule (e.g. growth
CC factor (GF), antibody to GF, antibody to cell surface receptor or
CC antibody capable of recognising complex comprising GF and GF
CC receptor). Conjugation is pref. via a disulphide bond.
CC The AB-oligonucleotide conjugate is used to prevent or suppress TNF
CC induced diseases in animals.
CC See also AAQ11585-Q11593 and AAQ11595-Q11600.
CC
XX Sequence 29 BP; 3 A; 8 C; 6 G; 12 T; 0 other;
SU

Query Match 0.88; Score 29; DB 12; Length 29;
Best Local Similarity: 100.0%; Prod No. n.00;
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 7AS gaagggacccatgagcgttgaagaatgatg atg
- |||||
DB 29 GAATGACGCATGTAGCACTGAACAACATG 1

RESULT 7
AAQ40907%
ID AAQ40907 standard; DNA; 29 BP
XX
AC AAQ40907:
XX
DT 07-SEP-1993 (first entry)
XX
DE TNF oligonucleotide.
XX
KW Doublet; triplet; helix; duplex; kplex; major groove;
KW TNF; sepsis; tumour necrosis factor; ss.
XX
OS Synthetic.
PN W09309813-A.
XX
PD 27-MAY-1993.
XX
FE 10-NOV-1992; 92W%-GR02073.
XX
PR 12-NOV-1991; 91GR-0023947.
XX
PA (IMCR) IMPERIAL CANCER RES TECHNOLOGY.
XX
PI Egenetos AA;
XX
DR WPL: 1993-182253/22.
XX

(cpd. comprising anti sense oligo nucleotide and radioactive moiety - for treating viral infection); sepsis, leukaemia and tumours

Disclosure; Page 6; 43pp; English.

Examples of antisense oligonucleotides that can be used for preventing or suppressing TNF induced diseases, for example sepsis, are those complementary to TNF DNA or RNA. For example, oligo nucleotides complementary to the following can be used: sequences

```

00 around the 5' end of the TNF messenger RNA sequences at the
01 determination of and within the mRNA region coding for the 11 amino acids
02 domain of the TNF protein and sequences within the coding region of
03 the 12 kb unit. Examples of the specific oligonucleotide sequences
04 complementary to the above mRNA regions are given in AA040906-10.
05
06
07
08
09
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65
66
67
68
69
70
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
100
101
102
103
104
105
106
107
108
109
110
111
112
113
114
115
116
117
118
119
120
121
122
123
124
125
126
127
128
129
130
131
132
133
134
135
136
137
138
139
140
141
142
143
144
145
146
147
148
149
150
151
152
153
154
155
156
157
158
159
160
161
162
163
164
165
166
167
168
169
170
171
172
173
174
175
176
177
178
179
180
181
182
183
184
185
186
187
188
189
190
191
192
193
194
195
196
197
198
199
200
201
202
203
204
205
206
207
208
209
210
211
212
213
214
215
216
217
218
219
220
221
222
223
224
225
226
227
228
229
230
231
232
233
234
235
236
237
238
239
240
241
242
243
244
245
246
247
248
249
250
251
252
253
254
255
256
257
258
259
260
261
262
263
264
265
266
267
268
269
270
271
272
273
274
275
276
277
278
279
280
281
282
283
284
285
286
287
288
289
290
291
292
293
294
295
296
297
298
299
300
301
302
303
304
305
306
307
308
309
310
311
312
313
314
315
316
317
318
319
320
321
322
323
324
325
326
327
328
329
330
331
332
333
334
335
336
337
338
339
340
341
342
343
344
345
346
347
348
349
350
351
352
353
354
355
356
357
358
359
360
361
362
363
364
365
366
367
368
369
370
371
372
373
374
375
376
377
378
379
380
381
382
383
384
385
386
387
388
389
390
391
392
393
394
395
396
397
398
399
400
401
402
403
404
405
406
407
408
409
410
411
412
413
414
415
416
417
418
419
420
421
422
423
424
425
426
427
428
429
430
431
432
433
434
435
436
437
438
439
440
441
442
443
444
445
446
447
448
449
450
451
452
453
454
455
456
457
458
459
460
461
462
463
464
465
466
467
468
469
470
471
472
473
474
475
476
477
478
479
480
481
482
483
484
485
486
487
488
489
490
491
492
493
494
495
496
497
498
499
500
501
502
503
504
505
506
507
508
509
510
511
512
513
514
515
516
517
518
519
520
521
522
523
524
525
526
527
528
529
530
531
532
533
534
535
536
537
538
539
540
541
542
543
544
545
546
547
548
549
550
551
552
553
554
555
556
557
558
559
560
561
562
563
564
565
566
567
568
569
570
571
572
573
574
575
576
577
578
579
580
581
582
583
584
585
586
587
588
589
590
591
592
593
594
595
596
597
598
599
600
601
602
603
604
605
606
607
608
609
610
611
612
613
614
615
616
617
618
619
620
621
622
623
624
625
626
627
628
629
630
631
632
633
634
635
636
637
638
639
640
641
642
643
644
645
646
647
648
649
650
651
652
653
654
655
656
657
658
659
660
661
662
663
664
665
666
667
668
669
670
671
672
673
674
675
676
677
678
679
680
681
682
683
684
685
686
687
688
689
690
691
692
693
694
695
696
697
698
699
700
701
702
703
704
705
706
707
708
709
710
711
712
713
714
715
716
717
718
719
720
721
722
723
724
725
726
727
728
729
730
731
732
733
734
735
736
737
738
739
740
741
742
743
744
745
746
747
748
749
750
751
752
753
754
755
756
757
758
759
760
761
762
763
764
765
766
767
768
769
770
771
772
773
774
775
776
777
778
779
780
781
782
783
784
785
786
787
788
789
790
791
792
793
794
795
796
797
798
799
800
801
802
803
804
805
806
807
808
809
810
811
812
813
814
815
816
817
818
819
820
821
822
823
824
825
826
827
828
829
830
831
832
833
834
835
836
837
838
839
840
841
842
843
844
845
846
847
848
849
850
851
852
853
854
855
856
857
858
859
860
861
862
863
864
865
866
867
868
869
870
871
872
873
874
875
876
877
878
879
880
881
882
883
884
885
886
887
888
889
890
891
892
893
894
895
896
897
898
899
900
901
902
903
904
905
906
907
908
909
910
911
912
913
914
915
916
917
918
919
920
921
922
923
924
925
926
927
928
929
930
931
932
933
934
935
936
937
938
939
940
941
942
943
944
945
946
947
948
949
950
951
952
953
954
955
956
957
958
959
960
961
962
963
964
965
966
967
968
969
970
971
972
973
974
975
976
977
978
979
980
981
982
983
984
985
986
987
988
989
990
991
992
993
994
995
996
997
998
999
1000
1001
1002
1003
1004
1005
1006
1007
1008
1009
1010
1011
1012
1013
1014
1015
1016
1017
1018
1019
1020
1021
1022
```

AC AAT79711:
 XX
 XX 40 DEC 1997 (first entry)
 DE
 XX
 DE Control probe.
 XX
 XX Vaccines: htrb gene; Gram negative bacterium; non-toxic mutant;
 XX pathogen; endotoxin; diagnostic; passive immunisation;
 KW pathogen; endotoxin; diagnostic; passive immunisation;
 KW Hemophilus influenzae; tumour necrosis factor; alpha; TNF; probe;
 KW ss:
 XX
 XX Synbio Inc.
 OS
 XX W09719688 A1.
 PN
 XX 05 JUN 1997:
 PD
 XX 27 NOV 1996: 96MO US19984.
 PE
 XX 01 DEC 1995: 9505-0565943
 PV
 XX (AMC) AMERICAN CYANAMID CO
 XX (B&C) UNIV CALIFORNIA
 PA (LOWA) UNIV IOWA RES FOUND.
 XX
 XX
 PI Affect14 MA, Arumotham R, Gibson BK, Lee N, Sunshine MG:
 PN WPI: 1997 410355/28.
 XX
 XX New Gram negative bacterial pathogen vaccines - comprising a htrb
 PI mutant or an endotoxin isolated from an htrb mutant optionally
 PE conjugated to a carrier protein.
 PT
 XX
 XX Example 4: Page 63: 7ppp: English.
 PS
 XX This oligonucleotide comprises a control probe for use in
 CC studies of tumour necrosis factor (TNF) alpha mRNA production
 CC in SV40 transformed human respiratory epithelial cells and in
 CC human primary respiratory epithelial cells following endotoxin
 CC stimulation. A TNF probe (see AAT79710) was also used. The amount
 CC of TNF mRNA detected is directly proportional to the toxicity of the
 CC stimulant lipopolysaccharide. A reduced ability to stimulate TNF
 CC is an indication of an htrb mutant (see AAM25084) being substantially
 CC reduced in toxicity due to the lack of one or more secondary acyl
 CC chains in the lipid A portion of the endotoxin. Mutants of the
 CC htrb gene (see also AAT79708), or an endotoxin produced by such a
 CC mutant, can be used in claimed vaccines against Gram negative
 CC bacterial pathogens.
 CC
 XX
 XX Sequence 40 BP: 6 A; 7 C; 11 G; 6 T; 0 other:
 SO
 Query Match 0.88; Score 40; DB 18; Length 40;
 Best Local Similarity 100.0%; Pred. No. 0.037;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2224 cctctgcaatggaatggaatggaat 2253
 DB 1 cctctgcaatggaatggaatggaat 40
 RESULT 9
 AAZ20779/c
 ID AAZ20779 standard; DNA: 40 BP
 XX
 AC AAZ20779:
 DE
 XX 06 DEC 1999 (first entry)
 DE
 XX PCR primer for oncostat in M coding sequence.
 DE
 XX oncostat in M; OSM; human; antagonist; inflammatory arthropathy; asthma;
 KW inflammatory disorder; collagen release; inflammatory disorder; therapy;
 KW

KW rheumatoid arthritis; psoriatic arthritis; juvenile arthritis; gastritis;
 KW inflammatory osteoarthritis; reactive arthritis; Crohn's disease;
 KW ulcerative colitis; H. pylori infection; Alzheimer's disease; psoriasis;
 KW chronic obstructive pulmonary disease; multiple sclerosis; PCR primer;
 KW ss:
 XX
 XX Synbio Inc.
 OS
 XX Homo sapiens.
 XX
 XX W09948524 A2.
 PN
 XX 30 SEP 1999:
 PD
 XX 25 MAR 1999: 99MO GR00943.
 PE
 XX 26 MAR 1998: 98GB-0006540.
 PV
 XX (GLAX) GLAXO GROUP LTD.
 XX
 XX L11c PE:
 PN
 XX WPI: 1999 580363/49.
 DR
 XX
 XX Use of antagonists to oncostat in M or oncostat in M receptors, for
 PI treatment of inflammatory arthropathy or inflammatory disorder -
 PT
 XX
 XX Example 2: Page 17: 60pp: English.
 PS
 XX This sequence represents a PCR primer for DNA encoding the human
 CC oncostat in M protein. The invention relates to the use of an antagonist
 CC to oncostat in M (OSM) or an OSM receptor, for the manufacture of a
 CC medicament for the treatment of an inflammatory arthropathy or an
 CC inflammatory disorder. The antagonists can prevent or reduce collagen
 CC release from cartilage. They can be used to treat inflammatory disorders
 CC such as rheumatoid arthritis, psoriatic arthritis, juvenile arthritis,
 CC inflammatory osteoarthritis and/or reactive arthritis, Crohn's disease,
 CC ulcerative colitis, gastritis e.g. gastritis resulting from H. pylori
 CC infection, asthma, chronic obstructive pulmonary disease, Alzheimer's
 CC disease, multiple sclerosis and psoriasis.
 CC
 XX
 XX Sequence 40 BP: 10 A; 10 C; 6 G; 4 T; 0 other:
 SO
 Query Match 0.88; Score 40; DB 20; Length 40;
 Best Local Similarity 100.0%; Pred. No. 0.037;
 Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2556 cctcgaacgaactcttgaatggaatggaat 2585
 DB 30 GTCGTGCGAGGCGTCACCTTGGCATCAATTCG 1
 RESULT 6
 AAG11594/c
 ID AAG11594 standard; DNA: 29 BP
 XX
 AC AAG11594:
 DE
 XX 03 JUL 1991 (first entry)
 DE
 XX Antisense oligonucleotide #2 complementary to TNF sequences.
 DE
 XX Tumour Necrosis Factor; sepsis; AIDS; ss.
 KW
 KW Synbio Inc.
 OS
 XX W09104753-A.
 PN
 XX 18 APR 1991:
 PD
 XX 17 SEP 1996: 96MO US05272.
 PE
 XX 02 OCT 1989: 8905 0416017.
 PV

CC The anti-sense oligonucleotide is complementary to TNF mRNA. It is
 CC conjugated to a cell surface ligand-binding molecule (e.g. growth
 CC factor (GF), antibody to GF, antibody to cell surface receptor or
 CC antibody capable of recognising complex comprising GF and GF
 CC receptor). Conjugation is pref. via a disulphide bond.
 CC The Ab-oligonucleotide conjugate is used to prevent or suppress TNF
 CC induced diseases in animals.
 CC See also AA011585-Q11594 and AA011596-Q11600.
 XX
 SU Sequence 30 BP; 13 A; 3 C; 12 G; 2 T; 0 other;

Query Match 0.8%; Score 30; DB 12; Length 40;
 Best Local Similarity 100.0%; Pred. No. 0.037;
 Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 886 ttgttctcagctcttctctctctgac 915
 |||
 DB 30 ttgttctcagctcttctctctctgac 1

RESULT 2

AA040908/c
 ID AA040908 standard; DNA: 30 BP.

AC AA040908;

DI 07-SEP-1993 (first entry)

DE TNF oligonucleotide.

KW Double; triple; helix; duplex; triplex; major groove;
 KW TNF; sepsis; tumour necrosis factor; ss.

OS Synthetic.

PN W09309813-A.

PD 27-MAY-1993.

PE 10-NOV-1992; 92WO-GB02073.

PK 12-NOV-1991; 91GR-0021947

PA (IMCR) IMPERIAL CANCER RES TECHNOLOGY.

PI Epenetos AA;

DP WPI: 1993-182253/22.

PT Cpd. comprising anti-sense oligonucleotide and radioactive
 PT moiety for treating viral infection, sepsis, leukaemia and
 PT tumours

PS Disclosure: Page 6; 43pp; English.

CC Examples of antisense oligonucleotides that can be used for
 CC preventing or suppressing TNF-induced diseases, for example sepsis,
 CC are those complementary to TNF DNA or RNA. For example, oligo-
 CC nucleotides complementary to the following can be used: sequences
 CC around the 5' end of the TNF messenger RNA; sequences at the
 CC beginning of and within the mRNA region coding for the transmembrane
 CC domain of the TNF protein; and sequences within the coding region of
 CC the 17 kD mol. Examples of the specific oligonucleotide sequences
 CC complementary to the above mRNA regions are given in AA040908-10.
 XX
 SU Sequence 30 BP; 13 A; 3 C; 12 G; 2 T; 0 other;

Query Match 0.8%; Score 30; DB 14; Length 40;
 Best Local Similarity 100.0%; Pred. No. 0.037;
 Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 886 ttgttctcagctcttctctctctgac 915
 |||
 DB 30 ttgttctcagctcttctctctctgac 1

RESULT 3

AA179710/c
 ID AA179710 standard; DNA: 40 BP.

AC AA179710;

DI 30-DEC-1997 (first entry)

DE Tumour necrosis factor-alpha probe.

KW Vaccine; hrb gene; Gram negative bacterium; non-toxic mutant;
 KW pathogen; endotoxin; diagnosis; passive immunisation;
 KW Haemophilus influenzae; tumour necrosis factor alpha; TNF; probe;
 KW ss.

OS Synthetic.

PN W09719688-A1.

PD 05-JUN-1997.

PE 27-NOV-1996; 96WO-US18984.

PK 01-DEC-1995; 95US 0565943.

PA (AMCY) AMERICAN CYANAMID CO.
 PA (RECG) UNIV CALIFORNIA.

PA (IOWA) UNIV IOWA RES FOUND.

PI Apicella MA, Atumogham R, Gibson BW, Lee N, Sunshine MG;

PN WPI: 1997-210355/28.

PT New Gram-negative bacterial pathogen vaccines - comprising a hrb
 PT mutant or an endotoxin isolated from an hrb mutant optionally
 PT conjugated to a carrier protein.

PS Example 4; Page 63; 79pp; English.

CC This oligonucleotide is a probe for tumour necrosis factor (TNF)
 CC alpha. It was used to measure TNF mRNA produced by SV40
 CC transformed human respiratory epithelial cells and human primary
 CC respiratory epithelial cells following endotoxin stimulation. The
 CC amount of TNF mRNA detected is directly proportional to the toxicity
 CC of the stimulating lipopolysaccharide. A reduced ability to
 CC stimulate TNF is an indication of an hrb mutant (see AA025084) being
 CC substantially reduced in toxicity due to the lack of one or more
 CC secondary acyl chains in the lipid A portion of the endotoxin.
 CC Mutants of the hrb gene (see also AA179708) or an endotoxin
 CC produced by such a mutant, can be used in claimed vaccines against
 CC Gram negative bacterial pathogens.
 XX
 SU Sequence 30 BP; 6 A; 11 C; 7 G; 6 T; 0 other;

Query Match 0.8%; Score 40; DB 16; Length 40;
 Best Local Similarity 100.0%; Pred. No. 0.037;
 Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2253 tctcttctctctctctctctctctctct 2253
 |||
 DB 30 tctcttctctctctctctctctctctct 1

RESULT 4

AA179711
 ID AA179711 standard; DNA: 40 BP.

XX

VERSION KEYWORDS	SOURCE	CODICISM	REFERENCE	AUTHORS TITLE JOURNAL	COMMENT FEATURES SOURCE	BASE64 ENCODING	DECODING
AS6965.1 (1: 371,2948)	undifferentiated	undifferentiated	1 (bases 1 to 21)	Stanley, M. A. and Scarpino, C. C. TREATMENT OF PAPILLOMAVIRUS-ASSOCIATED LESIONS USING INTERFERON IN 12 PATIENTS WITH VULVA DYSPLASIA J. AM. ACAD. SURG. 126: 100-103 (1988)	1. -21 for_dism "undifferentiated" /db_xref "taxon:42644"	8 a 4 c 4 1	

[illegible][illegible][illegible]

TITLE	CHIMERIC OLIGONUCLEOTIDES AND USES THEREOF IN THE IDENTIFICATION OF ANTISENSE BINDING SITES
JOURNAL	PATENT: WO 97/0332-A 14-20-MAR-1997
BRAX GENOMICS LTD (GB)	
FEATURES	location/Qualifiers
SOURCE	1..21
	/organism "antibody1104"
	/db_xref "taxon:12644"
BASE COUNT	3 a
ORIGIN	2 c 11 g 5 t

Query Match	0.68;	Score 21;	Length 21;
Best Local Similarity	100.08;	Prod. No. 13;	
Matches 21;	Conservative	Matches	0;
		Indels	0;
		Gaps	0;

Qy	2340	gct cct cgc ccc aac atc atc aag	2360
Lb	21	gct cct cgc ccc aac atc atc aag	1

RESULTS	45	21 bp	500 bp	2000
AS9297373				
Artificial oligonucleotide primer sequence for detection of the gene (reverse)				

VERSION	AN297373.1	G1:8949081
KEYWORDS	collagen;coll;id; primer	
SYNOPSIS	synthetic construct.	
ORGANISM	synthetic construct	

REFERENCE:
AUTHORS
TITLE
species

(bases 1 to 21)
Singh, V. K., Maudslawi, A. K., Kim, A., and Malik, S.
Universal primer can amplify Tumor Necrosis Factor gene across
species

JOURNAL
REFERENCE
ATTENTION
TITLE
JOURNAL
FEATURES

Unpublished
2 (Chapters 1 to 21)
Srinivas V. K.
Direct Submission
Submitted (28-JUN-2000) Srinivas V. K., School of
Applied Technology, Panchsara Road, M.T. 520 017,
Tamil Nadu/India

[illegible]

Query Match	0.64	Score	21	DB	Length	21
Best Local Similarity	100.0%					
Matches	21	Conservative	0	Matches	0	Indels
QY	92%	accagcctctctgctgctga	94%			
DB	21	accagcctctctgctgctga	94%			

Search completed: April 20, 2002, 06:42:16
Job time: 11848 sec

RESULT 38
LOCUS 139742 22 bp DNA
DEFINITION Sequence 15 from patent us 5616490
ACCESSION 139742
VERSION 139742.1 GI:2084222
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE 1 (bases 1 to 22)
AUTHORS Sullivan, S.M. and Draper, K.G.
TITLE Ribozymes targeted to TMR alpha, RNA
JOURNAL Patent us 5616490-A, 15-01-APR-1997;
FEATURES
source location/Qualifiers
1..22
/organism="unknown"
BASE COUNT 4 a 4 c 9 g 3 t
ORIGIN

Query Match 0.68; Score 22; E-6; Length 22;
Best Local Similarity 100.0%; Prod. No. 3.5;
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0.

QY 2309 tcaagacacacagctgctc 2330
|||||
Db 1 tcaagacacacagctgctc 22

RESULT 39
LOCUS 139755 22 bp DNA
DEFINITION Sequence 28 from patent US 5616490.
ACCESSION 139755
VERSION 139755.1 GI:2084235
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE 1 (bases 1 to 22)
AUTHORS Sullivan, S.M. and Draper, K.G.
TITLE Ribozymes targeted to INF-alpha, RNA
JOURNAL Patent us 5616490-A, 28-01-APR-1997;
FEATURES
source location/Qualifiers
1..22
/organism="unknown"
BASE COUNT 3 a 3 c 4 g 12 t
ORIGIN

Query Match 0.68; Score 22; E-6; Length 22;
Best Local Similarity 100.0%; Prod. No. 3.5;
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0.

QY 3032 tctatctatcttgacactgta 3054
|||||
Db 1 tctatctatcttgacactgta 22

RESULT 40
LOCUS 158777 22 bp DNA
DEFINITION Sequence 24 from patent US 5652453.
ACCESSION 158777
VERSION 158777.1 GI:2478015
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE 1 (bases 1 to 22)
AUTHORS Fliers, W., Tavernier, J., and Van Ostado, X.

TITLE DNAs encoding tumor necrosis factor alpha, mutants
JOURNAL Patent: US 5652354-A, 24-29-JUL-1997;
FEATURES
source location/Qualifiers
1..22
/organism="unknown"
BASE COUNT 2 a 4 c 8 g 4 t
ORIGIN

Query Match 0.68; Score 22; E-6; Length 22;
Best Local Similarity 100.0%; Prod. No. 3.5;
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0.

QY 2201 gctctctctctgacatctctt 2242
|||||
Db 1 gctctctctctgacatctctt 22

RESULT 41
LOCUS AS6251797 22 bp DNA
DEFINITION Artificial reverse oligonucleotide primer sequence for tumor
ACCESSION A1251797
VERSION A1251797.2 GI:1994592
KEYWORDS oligonucleotide primer,
synthetic construct,
artificial sequence,
REFERENCE 1 (bases 1 to 22)
AUTHORS Maniatham, A.K., Srinivas, V.K., and Nair, S.
TITLE Reverse oligonucleotide primer (5'-3') for tumor necrosis factor
mRNA in human
JOURNAL Unpublished
REFERENCE 2 (bases 1 to 22)
AUTHORS Maniatham, A.K.
TITLE Direct Substitution
SUBMITTED (26-DEC-1999) Maniatham A.K., Department of Immunology,
Sanjay Gandhi Postgraduate Institute of Medical Sciences, Varanasi
Prad., Lucknow, UP 226 014, INDIA
REVISED BY [3]
3 (bases 1 to 22)
Maniatham, A.K.
TITLE Direct Substitution
SUBMITTED (18-DEC-2000) Maniatham A.K., Department of Immunology,
Sanjay Gandhi Postgraduate Institute of Medical Sciences, Kachharauli
Road, Lucknow, UP 226 014, INDIA
COMMENT On Dec 19, 2000 this sequence version replaced q1-0682805.
FEATURES
source location/Qualifiers
1..22
/organism="synthetic construct"
/label="taxon:32640"
misc_feature 1..22
Note: "Reverse primer for tumor necrosis factor mRNA in
human"
BASE COUNT 6 a 7 c 5 g 4 t
ORIGIN

Query Match 0.68; Score 22; E-6; Length 22;
Best Local Similarity 100.0%; Prod. No. 3.5;
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0.

QY 2459 gctatgacacgacatctctt 2480
|||||
Db 22 gctatgacacgacatctctt 1

RESULT 42
LOCUS A56965 21 bp DNA
DEFINITION Sequence 23 from Patent W9629091.
ACCESSION A56965

VERSION AR10043.1 GI:12810761
 KEYWORDS
 SOURCE
 ORGANISM unknown
 UNCLASSIFIED
 REFERENCE 1 (bases 1 to 22)
 AUTHORS Baker,B.P., Bennett,C.,Frank, Butler,M.M. and Shahab,M.R., Jr.
 TITLE Antisense oligonucleotide modulation of tumor necrosis factor- α (TNF- α) expression
 JOURNAL Patient : US 6080780 A 44 27 JUN 2000
 FEATURES
 SOURCE 1..22
 BASE COUNT 7 a 4 c 9 g 4 t
 ORIGIN

Query Match 0.68; Score 22; DB 6; Length 22;
 Host Local Similarity 100.0%; Prod. No. 3,57
 Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1602 tctctctatcagctctcgc 1623
 DB 22 tctctctatcagctctcgc 1

RESULT 44
 LOCUS AR149968 22 bp DNA PAT 08-AUG-2001
 DEFINITION Sequence 44 from patient US 6228642.
 ACCESSION AR149968
 VERSION AR149968.1 GI:15114559
 KEYWORDS
 SOURCE unknown
 ORGANISM unknown
 UNCLASSIFIED
 REFERENCE 1 (bases 1 to 22)
 AUTHORS Baker,B.P., Bennett,C.,Frank, Butler,M.M. and Shahab,M.R., Jr.
 TITLE Antisense oligonucleotide modulation of tumor necrosis factor- α (TNF- α) expression
 JOURNAL Patient : US 6228642-A 44 08 MAY 2001
 FEATURES
 SOURCE 1..22
 BASE COUNT 7 a 4 c 9 g 4 t
 ORIGIN

Query Match 0.68; Score 22; DB 6; Length 22;
 Host Local Similarity 100.0%; Prod. No. 3,57
 Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1602 tctctctatcagctctcgc 1623
 DB 22 tctctctatcagctctcgc 1

RESULT 45
 LOCUS 112255 22 bp DNA PAT 26-JUL-1995
 DEFINITION Sequence 24 from patient US 5422104.
 ACCESSION 112255
 VERSION 112255.1 GI:910278
 KEYWORDS
 SOURCE unknown
 ORGANISM unknown
 UNCLASSIFIED
 REFERENCE 1 (bases 1 to 22)
 AUTHORS Fiers,W., Taverener,J. and Van ostade,X.
 TITLE TNF-mutecins
 JOURNAL Patient : US 5422104 A 24 06 JUN 1995
 FEATURES
 SOURCE 1..22
 BASE COUNT 7 a 4 c 9 g 4 t
 ORIGIN

BASE COUNT 2 a 8 c 8 g 4 t
 ORIGIN

Query Match 0.68; Score 22; DB 6; Length 22;
 Host Local Similarity 100.0%; Prod. No. 3,57
 Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2221 gccctgcagcagcagcagc 2242
 DB 1 gccctgcagcagcagcagc 22

RESULT 46
 LOCUS 117246 22 bp DNA PAT 03-APR-1996
 DEFINITION Sequence 14 from patient US 5486463.
 ACCESSION 117246
 VERSION 117246.1 GI:1252154
 KEYWORDS
 SOURCE unknown
 ORGANISM unknown
 UNCLASSIFIED
 REFERENCE 1 (bases 1 to 22)
 AUTHORS Lesslauer,W., Loischer,H. and Stuber,D.
 TITLE TNF-mutecins
 JOURNAL Patient : US 5486463-A 14 23 JAN 1996
 FEATURES
 SOURCE 1..22
 BASE COUNT 2 a 8 c 8 g 4 t
 ORIGIN

Query Match 0.68; Score 22; DB 6; Length 22;
 Host Local Similarity 100.0%; Prod. No. 3,57
 Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2221 gccctgcagcagcagcagc 2242
 DB 1 gccctgcagcagcagcagc 22

RESULT 47
 LOCUS 144465 22 bp DNA PAT 05-FEB-1997
 DEFINITION Sequence 6 from patient US 5597899.
 ACCESSION 144465
 VERSION 144465.1 GI:1825256
 KEYWORDS
 SOURCE unknown
 ORGANISM unknown
 UNCLASSIFIED
 REFERENCE 1 (bases 1 to 22)
 AUTHORS Hammer,D., Lesslauer,W., Loischer,H. and Stuber,D.
 TITLE Tumor necrosis factor mutecins
 JOURNAL Patient : US 5597899 A 6 28 JAN 1997
 FEATURES
 SOURCE 1..22
 BASE COUNT 3 a 4 c 8 g 7 t
 ORIGIN

Query Match 0.68; Score 22; DB 6; Length 22;
 Host Local Similarity 100.0%; Prod. No. 3,57
 Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2554 gacctgcagcagcagcagc 2575
 DB 1 gacctgcagcagcagcagc 22

BASE COUNT 2 a 8 c 6 g 6 t
ORIGIN

Query Match 0.68; Score 22; DB 6; Length 22;
Best Local Similarity 100.0%; Pred. No. 3.5;
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 724 atcagacagcagctctctctc 745
DB 1 GCTGCGAGGCGAGGTCTCTTCG 22

RESULT 29
LOCUS A78793 22 bp DNA PAT 19-OCT-1999
DEFINITION Sequence 14 from patent EP0563714.
ACCESSION A78793
VERSION A78793.1 GI:6090189
KEYWORDS
SOURCE unidentified.
ORGANISM unidentified.

REFERENCE 1 (bases 1 to 22)
AUTHORS Lesslauer, W. and Loetscher, H.
TITLE TNF-MUTEINS
JOURNAL Patent: EP 0563714-A 14 05-OCT-1993;
HOFFMANN LA FORTHE (CH)

FEATURES
Source 1..22
/organism="unidentified"
/db_xref="taxon:32644"
BASE COUNT 2 a 8 c 8 g 4 t
ORIGIN

Query Match 0.68; Score 22; DB 6; Length 22;
Best Local Similarity 100.0%; Pred. No. 3.5;
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2231 gctctctgagcagctctctctg 2242
DB 1 GCTTCTTGCGCAATGCGCTGCG 22

RESULT 30
LOCUS AP052922 22 bp DNA PAT 29-SEP-1999
DEFINITION Sequence 46 from patent US 5831976.
ACCESSION AP052922
VERSION AP052922.1 GI:5477784
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.

REFERENCE 1 (bases 1 to 22)
AUTHORS Maleyly, R. deWail, Howard, M., Hsu, D., Ishida, H., O'Garra, A.,
Spits, H. and Zlotnik, A.
TITLE Use of interleukin-10 (IL-10) to treat endotoxin- or
superantigen-induced toxicity
JOURNAL Patent: US 5831976-A 46 10-NOV-1998;
FEATURES
Source 1..22
/organism="unknown"

BASE COUNT 3 a 8 c 5 g 6 t
ORIGIN

Query Match 0.68; Score 22; DB 6; Length 22;
Best Local Similarity 100.0%; Pred. No. 3.5;
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2494 ctgagagagagtgacgagctca 2515

DB 22 CTGAGAGAGAGTGACGAGCTCA 1

RESULT 41
LOCUS AK054285 22 bp DNA PAT 29-SEP-1999
DEFINITION Sequence 46 from patent US 5837293.
ACCESSION AK054285
VERSION AK054285.1 GI:5979862
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.

REFERENCE 1 (bases 1 to 22)
AUTHORS de Wail Maleyly, R., Howard, M., Hsu, D., Ishida, H., O'Garra, A.,
Spits, H. and Zlotnik, A.
TITLE Use of an interleukin-10 antagonist to treat a B cell mediated
autoimmune disorder
JOURNAL Patent: US 5837293-A 46 17-NOV-1998;
FEATURES
Source 1..22
/organism="unknown"

BASE COUNT 3 a 8 c 5 g 6 t
ORIGIN

Query Match 0.68; Score 22; DB 6; Length 22;
Best Local Similarity 100.0%; Pred. No. 3.5;
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2494 ctgagagagagtgacgagctca 2515
DB 22 CTGAGAGAGAGTGACGAGCTCA 1

RESULT 42
LOCUS AK054487 22 bp DNA PAT 29-SEP-1999
DEFINITION Sequence 46 from patent US 5837293.
ACCESSION AK054487
VERSION AK054487.1 GI:5980064
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.

REFERENCE 1 (bases 1 to 22)
AUTHORS de Wail Maleyly, R., Howard, M., Hsu, D., Ishida, H., O'Garra, A.,
Spits, H. and Zlotnik, A.
TITLE Use of interleukin-10 analogs for antagonists to treat endotoxin
or superantigen-induced toxicity
JOURNAL Patent: US 5837293-A 46 17-NOV-1998;
FEATURES
Source 1..22
/organism="unknown"

BASE COUNT 3 a 8 c 5 g 6 t
ORIGIN

Query Match 0.68; Score 22; DB 6; Length 22;
Best Local Similarity 100.0%; Pred. No. 3.5;
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2494 ctgagagagagtgacgagctca 2515
DB 22 CTGAGAGAGAGTGACGAGCTCA 1

RESULT 43
LOCUS AK100413 22 bp DNA PAT 11-FEB-2001
DEFINITION Sequence 44 from patent US 6080580.
ACCESSION AK100413

QY 594 ccagatgagctatggtttctcc 537
 DB 24 CCAGATGAGCTCATGCGTTTCGC 1

RESULT 20
 LOCUS AX104832/6 24 bp DNA PAT 40-APR 2001
 DEFINITION Sequence 1024 from Patent WO9122972.
 ACCESSION AX104832
 VERSION AX104832.1 GI:14921029
 KEYWORDS
 SOURCE synthetic construct.
 ORGANISM artificial sequence.
 REFERENCE 1 (bases 1 to 24)
 AUTHORS Kriegl, A.M., Schetter, C. and Vollmer, J.C.
 TITLE Immunostimulatory nucleic acids
 JOURNAL Patent: WO 0122972-A 1924 05-APR-2001;
 UNIVERSITY OF LEINA RESEARCH INSTITUTION (US) ; GARY PLANTING, LLC
 GmbH (DE)
 FEATURES
 source location/Qualifiers
 1..24
 /organism="synthetic construct"
 /db_xref="taxon:32630"
 BASE COUNT 7 a 6 c 7 g 4 t
 ORIGIN

Query Match 0.7% Score 24; DB 6; Length 24;
 Best Local Similarity 100.0%; Prod. No. 9.26;
 Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0

QY 504 ccagatgagctatggtttctcc 537
 DB 24 CCAGATGAGCTCATGCGTTTCGC 1

RESULT 21
 LOCUS 139730 24 bp DNA PAT 13 MAY 1997
 DEFINITION Sequence 3 from patent US 5616490.
 ACCESSION 139730
 VERSION 139730.1 GI:2084210
 KEYWORDS
 SOURCE Unknown.
 ORGANISM Unclassified.
 REFERENCE 1 (bases 1 to 24)
 AUTHORS Sullivan, S.M. and Treap, K.J.
 TITLE Pibromys targeted to TNF- α 1pha. PNA
 JOURNAL Patent: US 5616490-A 3 01-APR-1997;
 FEATURES
 source location/Qualifiers
 1..24
 /organism="unknown"
 BASE COUNT 8 a 11 c 3 g 2 t
 ORIGIN

Query Match 0.7% Score 24; DB 6; Length 24;
 Best Local Similarity 100.0%; Prod. No. 9.26;
 Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0

QY 605 ccagatgagctatggtttctcc 708
 DB 1 CCGCTGAAAACACCCCAACGCC 24

RESULT 22
 LOCUS AX012485 24 bp DNA PAT 06 SEP 2000
 DEFINITION Sequence 1 from Patent WO9544499.

ACCESSION AX012485
 VERSION AX012485.1 GI:9998484
 KEYWORDS
 SOURCE synthetic construct.
 ORGANISM artificial sequence.
 REFERENCE 1 (bases 1 to 23)
 AUTHORS Harvey, W.
 TITLE Method of analysis of chronic wounds
 JOURNAL Patent: WO 9544499 A 1 28 SEP 1999;
 HARVEY MEDICAL LTD (GB); HARVEY WILSON (GB)
 FEATURES
 source location/Qualifiers
 1..23
 /organism="synthetic construct"
 /db_xref="taxon:32630"
 /note="Primer used in analysis for TNF- α "
 BASE COUNT 6 a 2 c 9 g 6 t
 ORIGIN

Query Match 0.6% Score 23; DB 6; Length 23;
 Best Local Similarity 100.0%; Prod. No. 9.94;
 Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0

QY 284 agcgaatgagctatggtttctcc 406
 DB 1 AGCGAATGAGCTCATGCGTTTCGC 24

RESULT 24
 LOCUS 139746 23 bp DNA PAT 1 MAY 1997
 DEFINITION Sequence 9 from patent US 5616490.
 ACCESSION 139746
 VERSION 139746.1 GI:2084216
 KEYWORDS
 SOURCE Unknown.
 ORGANISM Unclassified.
 REFERENCE 1 (bases 1 to 23)
 AUTHORS Sullivan, S.M. and Treap, K.J.
 TITLE Pibromys targeted to TNF- α 1pha. PNA
 JOURNAL Patent: US 5616490-A 9 01-APR-1997;
 FEATURES
 source location/Qualifiers
 1..24
 /organism="unknown"
 BASE COUNT 1 a 8 c 5 g 9 t
 ORIGIN

Query Match 0.6% Score 23; DB 6; Length 23;
 Best Local Similarity 100.0%; Prod. No. 9.94;
 Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0

QY 881 ggtgctatggttcagctcttc 904
 DB 1 GGTGCTATGTTTCAGACCTCTTC 24

RESULT 24
 LOCUS Ab6669 23 bp DNA PAT 29 MAR 1999
 DEFINITION Sequence 11 from Patent WO9740172.
 ACCESSION Ab6669
 VERSION Ab6669.1 GI:1528159
 KEYWORDS
 SOURCE unidentified.
 ORGANISM unidentified.
 REFERENCE 1 (bases 1 to 29)
 AUTHORS Mallat, J.L., Molteni, R., Ravassard, P. and Toulhou, F.
 TITLE DELIVERED BY GENETIC HYBRIDIZATION SYSTEM
 JOURNAL Patent: WO 9740172-A 14 03-OCT-1997;

C. A method for treating airway disease in a subject has been produced.

protein-protein interactions such as modulation of interactions between protein sequences involved in receptor interactions, e.g., dimerization. Such methods can be used for identifying ligands for orphan receptors. The second challenge is sensitivity, that background is low and the

RESULT 26
AAF20107/c
ID AAF20107 standard; DNA: 26 BP.
XX
AC AAF20107-
XX
DT 14-MAR-2001 (first entry)
DE XX
Human tumour necrosis factor alpha polynucleotide fragment #1674.
KW low adenosine antisense oligonucleotides; phosphothioates; allergy;
KW human; airway disorder; bronchoconstriction; lung inflammation;
KW surfactant depletion; respiratory; bronchodilator; antiinflammatory;
KW immunosuppressive; antihistaminic analgesic; hypostensive; cytokines;
KW respiratory obstruction; pulmonary obstruction; impaired ventilation;
KW surfactant hypoproduction; pulmonary vasoconstriction; asthma; COPD;
KW refractory distress syndrome; fatal cystic fibrosis; allergic rhinitis;
KW pulmonary hypertension; emphysema; pulmonary transplantation rejection;
KW chronic obstructive pulmonary disease; pulmonary infection; bronchiectasis;
KW cancer; SS.
OS Homo sapiens.
XX
PN W0203062736 AL.
XX
FD 26-OCT-2000.
XX
PE 24 MAR 2000 18298320.
XX
PP 06-APE 1999 9405-AL709A
XX
PA (YREC-) UNIV EAST CAROLINA.
XX (NCEC/) NYCE J.W.
P1 NYCE JW:
XX
DR WP1: 2000-674539/66.
PT
PT trigger adenosine receptors during metabolism, used e.g. for treating
PT cancers and respiratory obstructions -
XX
PS Claim 14; Page 241; 1592pp; English.

The present invention describes low adenosine (A) content antisense oligonucleotides and compositions (I) comprising them. In the antisense oligonucleotides the A is replaced by a "majority" or alternative base. (I) can have respiratory, bronchodilator, antiinflammatory, analgesic, immunosuppressive, antihistaminic, hypertensive and cytoskeletal activities. The antisense oligonucleotides and (I) can be used to down-regulate the expression and/or activity of target polypeptides associated with lung/respiratory disorders and malignancies, such as stimulating and activating peptide factors and transmitters, transcription factors, immunoglobulins and antibodies, antibody receptors, cytokines and chemokines, endogenously produced specific and non-specific enzymes, binding proteins, adhesion molecules and their receptors, cytokine and chemokine receptors, adenosine receptors, bradykinin receptors, central nervous system (CNS) and peripheral nervous and non-nervous system system receptors, CNS and peripheral nervous and non-nervous system peptide transmitters, defensins, growth factors, vasactive peptides and receptors, binding proteins and malignancy associated proteins. The antisense oligonucleotides may be used in this way to treat disorders including respiratory obstruction (especially pulmonary obstruction and/or bronchoconstriction) and/or lung inflammation, allergies) and/or surfactant hypoproduction which are associated with a disease or condition selected from pulmonary vasoconstriction, inflammation, allergies, asthma, impaired respiration, respiratory distress syndrome, (RDS), pain, cystic fibrosis (CF), allergic rhinitis (AR), pulmonary hypertension, emphysema, chronic obstructive pulmonary disease (COPD), pulmonary transplantation rejection, pulmonary infections, bronchiectasis and/or cancer AAF18474 to AAF2174 represent human polynucleotide fragments and antisense oligonucleotides used in the exemplification of

The present invention.

Sequence 26 BP; C A: 10 G: 5 Q: 11 I: 0 other:

Query Match: 97% Score 26; PR 21; Length 26;
Best Local Similarity: 100.0%; Prod. No. 1.4;

MATCHES 26: Conservative 0; Mismatches 0; Indels 0; Gaps 0

2055 GACAGGCGAATAGAGCAGGAGGAGCA 2080
|||||
26 GAAAGCAAGAGAGGAAGAGAAAGGCA 1

RESIDUE 27
AAAAGAGGCGC
XX
XX AAA339H5: SLASHED: PMA: 26 BP.
XX
XX AAA339H5:
XX
XX 28-JUL-2000 (first entry)
XX
DE Low adenosine antisense oligonucleotide SEQ ID NO:1674.
XX
XX human adenosine receptor; low adenosine antisense oligonucleotide;
XX phosphoribitol; impaired respiration; inflammation; allergy;
XX allergic disorder; bronchoconstriction; inhibitor; anti-inflammatory;
XX anti-leukocyte adhesion; cytokines; cytokine; and vesicle impaired airway;
XX lung disease; asthma; eosinophilic; leukocytosis; acute; chronic asthma;
XX respiratory distress syndrome; pulmonary system; hypersensitivity; emphysema;
XX secondary hyperparathyroidism; chronic obstructive pulmonary disease; COPD;
XX cancer; lymphoma; lymphoma; carcinoma; metastasis; ss.
XX
XX from saptens.
XX
XX W0200009525-A2.
XX
XX 24-FEB-2000.
XX
XX 03-AUG-1999; 93WO-0817712.
XX
XX 03-AUG-1998; 98US-0095212.
XX
XX (PVEC) ONLY EAST CAROLINA.
XX
XX NYPE DW;
XX
XX KPI; 2000 2000/07/18.
XX
XX
XX New and sense oligonucleotides useful for treating such pulmonary
XX vasoconstriction, inflammation, allergies, asthma, hypertension,
XX brachitis, emphysema, respiratory distress syndrome, leukemia or
XX cancers -
XX
XX claim 1b Page 472; 14pp; English.

The present invention describes a new composition comprising an
antisense oligonucleotide (sn) with low adenosine (up to 15%) which
targets nucleic acid involved in bronchoconstriction, allergy, and/or
inflammation. The sn can have anti-inflammatory and/or allergic
action. It may also have analgesic activity. The compositions are
useful for the treatment of diseases associated with inflammation,
impairment airflow, including lung disease and diseases whose secondary
effects affect the lungs of a subject. They can be used for treating
e.g., ischemic conditions, pulmonary vasoconstriction, allergies,
allergic induced reactions, respiratory distress syndrome, pain, cystic
fibrosis, pulmonary hypertension, emphysema, chronic obstructive
pulmonary disease (COPD), and cancers such as leukemias, lymphomas,
carcinomas, and cancers which may metastasize to the lungs, including
breast and prostate cancer. The total length of the sn some content of
the sn reduces side effects. The A containing sn's break down with the
release of deoxyribose sugar which activates adenosine receptors causing
bronchoconstriction and inflammation. AAA12414 to AAA5312 represent the

P1 listing W. Menzel, K. Tappert, PA;
 XX
 DR WPI: 1999 41405/26.
 XX
 PS New cadherin polypeptide nucleic acid constructs
 XX
 XX Example; Page 88; 12pp; English.
 CC This sequence represents a PCR primer used in the construction of a
 CC cadherin polypeptide.
 CC The invention relates to cadherin polypeptide nucleic acid constructs,
 CC which are used to transform cells to produce systems for identifying
 CC compounds which modulate interactions between protein sequences. The
 CC cadherin polypeptides comprise a polypeptide domain, a transmembrane
 CC domain and a cadherin transcriptional regulatory domain. Cells transfected
 CC with nucleic acid encoding the fusion proteins and a cadherin reporter
 CC construct can be used for identifying compounds which modulate a specific
 CC protein-protein interaction such as modulation of interactions between
 CC protein sequences involved in receptor interactions, e.g., dimers.
 CC Such methods can be used for identifying ligands for orphan receptors.
 CC The system is extremely sensitive in that background is low and the
 CC magnitude of signal background is quite robust, such that even minor
 CC modulations in protein-protein interactions are readily detectable.
 XX
 SO Sequence 25 BP: 4 A; 2 C; 12 G; 8 T; 0 other;

Query Match 0.78; Score 25; DR 20; Length 25;
 Best Local Similarity 100.0%; Prod. No. 4, 3;
 Matches 25; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 GY 2599 ggaagcagcctcccaagc 2623
 ID 25 GGAAGCAGCCTCCCAAGC 1
 |||||||||||||||||||||

RESULT 44
 ID AAX5454/c standard; DNA: 25 BP;
 XX
 AC AAX5454/c;
 XX
 DE 05-JUL-1999 (first entry)
 XX
 DE Tumour necrosis factor alpha and isense oligonucleotide.
 XX
 DE Ad isense oligonucleotide; multiple target; ant isense treatment;
 KW impaired respiration; inflammation; lung disease;
 KW pulmonary vasoconstriction; inflammation; allergic rhinitis;
 KW acute asthma; allergy; asthma; impeded respiration;
 KW respiratory distress syndrome; pain; cystic fibrosis;
 KW pulmonary hypertension; pulmonary vasoconstriction; emphysema;
 KW chronic obstructive pulmonary disease; leukemia; lymphoma; carcinoma;
 KW colon cancer; breast cancer; lung cancer; pancreatic cancer;
 KW hepatocellular carcinoma; kidney cancer; melanoma; hepatic metastasis;
 KW prostate cancer; ss.
 XX
 OS Synthelec.
 XX
 PN W09914886-A1.
 XX
 ID 25-MAR-1999.
 XX
 DE 17-SEP-1998; 98W0-US19419.
 XX
 DE 09-JUN-1998; 98US-0094972.
 XX
 DE 17-SEP-1997; 97US-0059160.
 XX
 PA (OVER) UNIV EAST CAROLINA.
 XX
 PA Nyc: JWE
 XX
 P1
 XX
 DR WPI: 1999 220400/19.

XX
 XX New ant isense oligonucleotides used in treatment of, e.g., pulmonary
 PT vasoconstriction
 XX
 XX
 PS Disclosure; Page 57; 12pp; English.
 XX

CC The specification describes ant isense oligonucleotides (AAX52869, X55271)
 CC directed against at least 2 mRNAs selected from target genes, coding and
 CC non-coding regions of RNAs corresponding to target genes, gene
 CC initiation codons, genomic flanking regions, intron exon borders, the
 CC 5'-end, the 3'-end and the junction between coding and non-coding
 CC regions and all segments of RNAs encoding proteins associated with one
 CC or more diseases, conditions or mixtures. The ant isense oligonucleotides
 CC may be derived from sequences AAX5272-74. These multiple target
 CC oligonucleotides (specifically AAX5180-271) can be used for the
 CC ant isense treatment of diseases and conditions. Typical diseases and
 CC conditions are those associated with impaired respiration and
 CC inflammation, including lung diseases, pulmonary vasoconstriction,
 CC inflammation, allergic rhinitis, acute asthma, allergies, asthma, impeded
 CC respiration, respiratory distress syndrome, pain, cystic fibrosis,
 CC pulmonary hypertension, pulmonary vasoconstriction, emphysema, chronic
 CC obstructive pulmonary disease (COPD), and cancers such as leukemias,
 CC lymphomas, carcinomas e.g. colon cancer, breast cancer, lung cancer,
 CC pancreatic cancer, hepatocellular carcinoma, kidney cancer, melanoma,
 CC hepatic metastases, as well as all types of cancers which may metastasize
 CC or have metastasized to the lungs, including breast and prostate cancer.
 XX

SO Sequence 25 BP: 0 A; 12 C; 2 G; 11 T; 0 other;

Query Match 0.78; Score 25; DR 20; Length 25;
 Best Local Similarity 100.0%; Prod. No. 4, 3;
 Matches 25; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 GY 1029 ggaagcagcctcccaagc 1053
 ID 25 GGAAGCAGCCTCCCAAGC 1
 |||||||||||||||||||||

RESULT 44
 ID AAX54542/c standard; DNA: 25 BP;
 XX
 AC AAX54542;
 XX
 DE 05-JUL-1999 (first entry)
 XX
 DE Human adenosine A1 receptor ant isense oligonucleotide treatment.
 XX
 DE Ad isense oligonucleotide; multiple target; ant isense treatment;
 KW impaired respiration; inflammation; lung disease;
 KW pulmonary vasoconstriction; inflammation; allergic rhinitis;
 KW acute asthma; allergy; asthma; impeded respiration;
 KW respiratory distress syndrome; pain; cystic fibrosis;
 KW pulmonary hypertension; pulmonary vasoconstriction; emphysema;
 KW chronic obstructive pulmonary disease; leukemia; lymphoma; carcinoma;
 KW colon cancer; breast cancer; lung cancer; pancreatic cancer;
 KW hepatocellular carcinoma; kidney cancer; melanoma; hepatic metastasis;
 KW prostate cancer; ss.
 XX
 OS Synthelec.
 XX
 PN W09914886-A1.
 XX
 ID 25-MAR-1999.
 XX
 DE 17-SEP-1998; 98W0-US19419.
 XX
 DE 09-JUN-1998; 98US-0094972.
 XX
 DE 17-SEP-1997; 97US-0059160.
 XX
 PA (OVER) UNIV EAST CAROLINA.
 XX
 PA Nyc: JWE
 XX
 P1
 XX
 DR WPI: 1999 220400/19.

P1 NYCE JW;
 XX
 DP WPI: 1999-229400/19.
 XX
 PT New antisense oligonucleotides used in treatment of, e.g., pulmonary
 PT vasoconstriction
 XX
 PS Disclosure: Page 27; 120pp; English.
 XX
 CC The specification describes antisense oligonucleotides (AAV52659, AAV5271)
 CC directed against at least 2 mRNAs selected from target genes, coding and
 CC non-coding regions of mRNAs corresponding to target genes, gene
 CC initiation regions, genomic flanking regions, intron-exon borders, the
 CC 5'-end, the 3'-end and the juxtaposition between coding and non-coding
 CC regions and all segments of mRNAs encoding proteins associated with one
 CC or more diseases, conditions or ailments. The antisense oligonucleotides
 CC may be derived from sequences AAV5272-74. These multiple target
 CC oligonucleotides (specifically AAV5266-73) can be used for the
 CC antisense treatment of diseases and conditions. Typical diseases and
 CC conditions are those associated with impaired respiration and
 CC inflammation, including lung diseases, pulmonary vasoconstriction,
 CC inflammation, allergic rhinitis, acute asthma, allergies, asthma, impaired
 CC respiration, respiratory distress syndrome, pain, cystic fibrosis, chronic
 CC obstructive pulmonary disease, pulmonary vasoconstriction, idiopathic
 CC lymphomas, carcinomas e.g., colon cancer, breast cancer, lung cancer,
 CC pancreatic cancer, hepatocellular carcinoma, kidney cancer, melanoma,
 CC hepatic metastases, as well as all types of cancers which may metastasize
 CC or have metastasized to the lungs, including breast and prostate cancer.
 XX
 SQ Sequence: 25 BP; 0 A; 12 C; 7 G; 6 T; 0 other.
 XX
 Query Match: C:7%, Score: 25, Lb: 20, Length: 25;
 Best Local Similarity: 100.0%; Prod. No. 3.3;
 Matches: 25; Conservative: 0; Mismatches: 0; Indels: 0; Gaps: 0;
 27 2429 ggcacagagagagagagagagagagagag 2444
 ||||||||||||||||||||||||||||
 DB 25 gttatgagagagagagagagagagagagag 1
 ||||||||||||||||||||||||||||
 RESULT 35
 AAF20101/7:
 ID AAF20101 standard; DNA; 25 BP.
 AC AAF20101:
 XX
 DT 14-MAR-2001 (first entry)
 XX
 DE Human tumour necrosis factor alpha polynucleotide fragment #1648.
 XX
 KW low adenosine antisense oligonucleotide; phosphorothioate; allergy;
 KW human; airway disorder; bronchoconstriction; lung inflammation;
 KW surfactant depletion; respiratory; bronchodilator; antiinflammatory;
 KW immunosuppressive; antiallergic; analgesic; hypotensive; cytosolic;
 KW respiratory obstruction; pulmonary obstruction; impaired respiration;
 KW surfactant hypoproduction; pulmonary vasoconstriction; asthma; cystic
 KW respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis;
 KW pulmonary hypertension; emphysema; pulmonary transplantation rejection;
 KW chronic obstructive pulmonary disease; pulmonary infection; bronchitis;
 KW cancer; ss.
 XX
 OS Homo sapiens.
 XX
 PN WO2000/62736-A2.
 XX
 PD 26-OCT-2000.
 XX
 PF 24-MAR-2000; 2000WO-0509020.
 XX
 PR 06-APR-1999; 99US-0127958.

PA (CYCLO) UNIV EAST CAROLINA.
 PA (NYCE/) NYCE J W.
 XX
 XX
 P1 NYCE JW;
 XX
 DR WPI: 2000-679539/66.
 XX
 PT low adenosine (A) content antisense oligonucleotides which do not
 PT trigger adenosine receptors during metabolism, useful e.g., for treating
 PT cancer and respiratory obstructions.
 XX
 PS Claim 14, Page 241, 1592pp; English.
 XX
 CC The present invention describes low adenosine (A) content antisense
 CC oligonucleotides and compositions (1) comprising them. In the antisense
 CC oligonucleotide the A is replaced by a universal or alternative base-
 CC (1) "A" base respiratory, bronchodilator, antiinflammatory, analgesic,
 CC immunosuppressive, antiallergic, hypotensive and cytosolic proteins.
 CC The antisense oligonucleotides and (1) can be used to down regulate the
 CC expression and/or activity of target polypeptides associated with
 CC respiratory disorders and with diseases, such as stimulating and
 CC activating peptide factors and transmitters, transcription factors,
 CC ionophores and other factors involved in cell growth and
 CC chemokines, cytokines, growth factors and other proteins and
 CC binding proteins, adhesion molecules and their receptors, cytokine and
 CC chemokine receptors, adenosine receptors, bradykinin receptors, central
 CC nervous system (CNS) and peripheral nervous system (PNS) peptide
 CC receptors, CNS and peripheral nervous system (PNS) peptide
 CC transmitters, depressants, growth factors, cytokines and
 CC receptors, binding proteins and malignancy associated proteins. The
 CC antisense oligonucleotides and (1) can be used to treat disorders
 CC including respiratory obstruction (especially pulmonary obstruction
 CC and/or bronchoconstriction) and/or lung inflammation, allergies
 CC and/or surfactant hypoproduction which are associated with a disease or
 CC condition selected from pulmonary vasoconstriction, inflammation,
 CC allergies, asthma, impaired respiration, respiratory distress syndrome
 CC (RDS), pain, cystic fibrosis (CF), allergic rhinitis (AR), pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease (COPD),
 CC pulmonary transplantation rejection, pulmonary infections, bronchitis,
 CC and/or cancer. AAF16434 to AAF21513 represent human polynucleotide
 CC fragments and antisense oligonucleotides used in the exemplification of
 CC the present invention.
 XX
 SQ Sequence: 25 BP; 0 A; 12 C; 7 G; 11 T; 0 other;
 XX
 Query Match: C:7%, Score: 25, Lb: 20, Length: 25;
 Best Local Similarity: 100.0%; Prod. No. 3.3;
 Matches: 25; Conservative: 0; Mismatches: 0; Indels: 0; Gaps: 0;
 27 1029 gagatcgcagagagagagagagagagag 1054
 ||||||||||||||||||||||||||||
 DB 25 gaaatgagagagagagagagagagagagag 1
 ||||||||||||||||||||||||||||
 RESULT 36
 AAF20108/2:
 ID AAF20108 standard; DNA; 25 BP.
 AC AAF20108:
 XX
 DT 14-MAR-2001 (first entry)
 XX
 DE Human tumour necrosis factor alpha polynucleotide fragment #1675.
 XX
 KW low adenosine antisense oligonucleotide; phosphorothioate; allergy;
 KW human; airway disorder; bronchoconstriction; lung inflammation;
 KW surfactant depletion; respiratory; bronchodilator; antiinflammatory;
 KW immunosuppressive; antiallergic; analgesic; hypotensive; cytosolic;
 KW respiratory obstruction; pulmonary obstruction; impaired respiration;
 KW surfactant hypoproduction; pulmonary vasoconstriction; asthma; RDS;
 KW respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis;
 KW pulmonary hypertension; emphysema; pulmonary transplantation rejection;
 KW cancer; ss.

XX 09-FEB-1999; 66CR-0002919
 XX
 PA (ISIS-) ISIS INNOVATION LTD.
 XX
 P1 Knight JC, Kwiatkowski DP;
 XX
 DR WPI: 2000-570015/54
 XX
 P1 Sequence specific DNA binding protein capable of binding specifically
 P1 to the alpha site human tumor necrosis factor-alpha promoter useful for
 PT identifying compounds which can modulate the expression of tumor
 PT necrosis factor-alpha
 XX
 PS Example 3; Fig 7; 56pp; English.

CC The present sequence is a probe used to detect the position of the beta
 CC site of the tumor necrosis factor-alpha (TNF-alpha) promoter sequence.
 CC The alpha site, which is a part of the invention, contains a
 CC polymorphism, the sequence of which can be used to test an individual's
 CC predisposition to inflammatory diseases. These include cerebral malaria,
 CC rheumatoid arthritis, inflammatory bowel disease and systemic lupus
 CC erythematosus. The present sequence can also be used to identify
 CC DNA-binding proteins and compounds which interfere with the normal
 CC transcription factor binding at this position, enabling the modulation of
 CC TNF-alpha gene expression. This probe was used in an electrophoretic
 CC mobility shift assay to determine the precise position of the beta site.

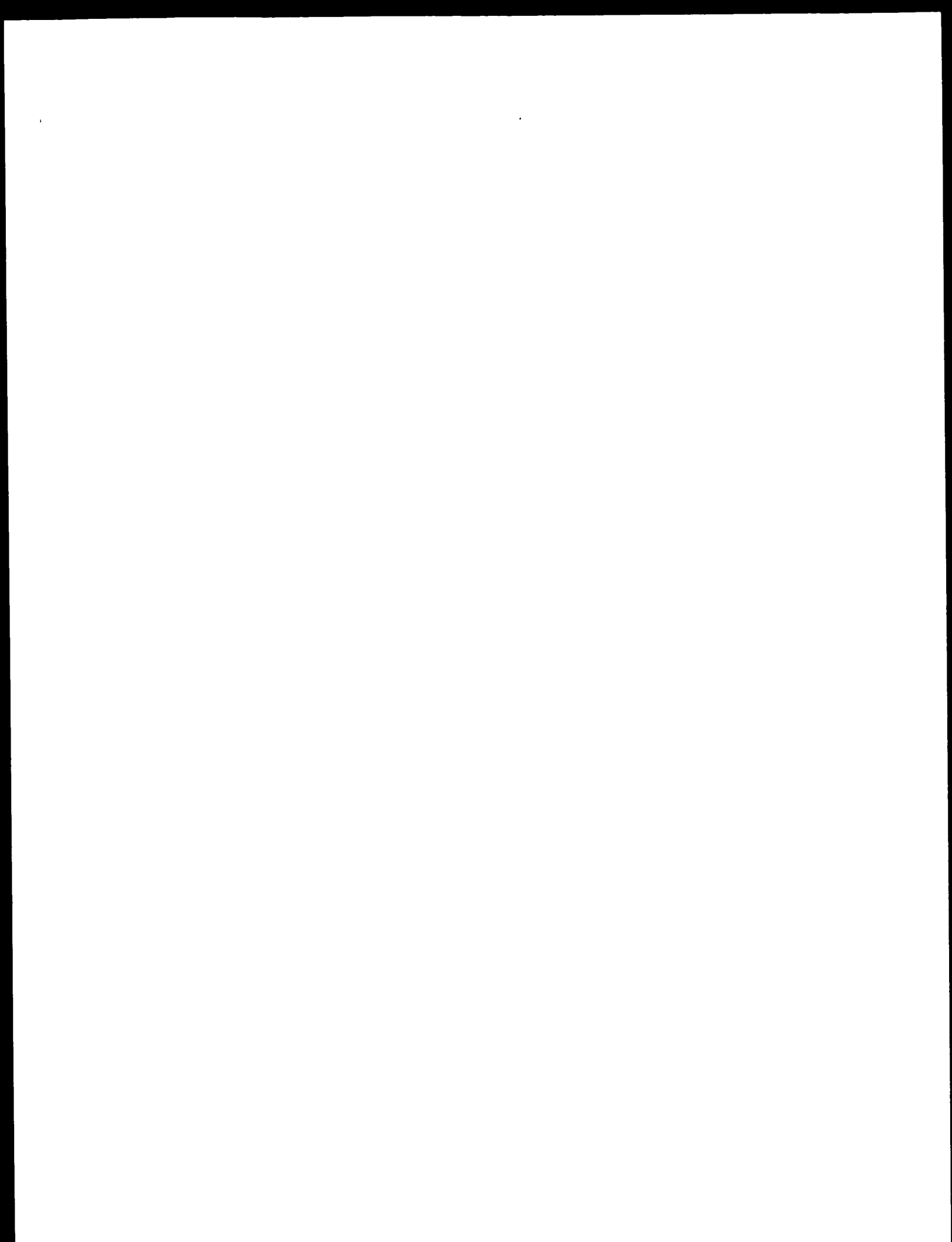
SQ Sequence 25 BP; 11 A; 6 G; 6 C; 2 T; 0 other;

Query Match 0.7%; Score 25; DB 21; Length 25;
 Host Local Similarity 100.0%; Prod No. 44;
 Matches 25; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 242 taagaggaaacagaccacgacctg 246
 D8 | ||||| ||||| ||||| |||||
 D8 1 taagaggaaacagaccacgacctg 25

RESULT 39
 AAC61633
 ID AAC61633 standard; DNA: 25 BP.
 XX
 AC AAC61633;
 XX
 DT 19-FEB-2001 (first entry)
 XX
 DE PCR primer used to amplify a tumour necrosis factor alpha gene.
 XX
 KW Human; tumour necrosis factor alpha; bioelectronic microchip;
 RW single nucleotide polymorphism; pcr primer; ss.
 XX
 CS Homo sapiens.
 XX
 FN W02030558522-A1.
 XX
 PD 05-OCT-2000.
 XX
 PE 29-MAR-2000; 2000WFO-TSAC17
 XX
 PR 30-MAR-1999; 99US-0126865.
 XX
 PA (NANO-) NANOGEN INC.
 XX
 P1 Giles PN, Dillon PJ, Wu DJ, Foster CB, Chanock SJ;
 XX
 DR WPI: 2000-638354/61
 XX
 P1 Detecting single nucleotide polymorphism by utilizing a bioelectronic
 PT microchip having several test sites -
 XX
 PS Example 4; Page 17; 46pp; English.

[illegible]



GenCore version 4.5
Copyright (c) 1993 - 2000 Computer, Ltd

QM nucleic - nucleic search, using sw model

Run on: April 20, 2002, 03:27:03, Search time: 205.95 seconds
(without alignment)

Title:	US-09-824-322B-1
Perfect score:	3634

Sequence: 1 qd

alccgqgtgatttcaat.....atttcaactctggaattc 3534

Scoring table:	01.160_Nine	
Gapop 60 0		Gapext 60 0

Searched: 11351937 seqs, 5372889281 residues

Word size =

Total number of fits satisfying chosen parameters.
2601

Maximum DB seq length: 30

Post-processing: Listing first 45 summaries

Post-processing: Listing first 45 summaries

Database :

```

1:  em_esthm: *
2:  em_esthm: *
3:  em_esthm: *
4:  em_esthm: *
5:  em_esthm: *
6:  em_esthm: *
7:  em_esthm: *
8:  em_esthm: *
9:  em_hic: *
10: qb_estl: *
11: qb_estr: *
12: qb_hic: *
13: qb_gss: *
14: em_gss_fun: *
15: em_gss_hum: *
16: em_gss_inv: *
17: em_gss_prl: *
18: em_gss_pro: *
19: em_gss_rnd: *
20: em_gss_vtr: *
21: em_gss_other: *

```

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result	Score	Query Match	Length	ID	Description
1	19	0.5	25	12	AT666929
2	18	0.5	26	13	AE416392
3	17	0.5	23	13	AE430288
4	17	0.5	25	13	AE238219
5	16	0.4	22	13	AE954229
6	16	0.4	23	13	AE764246
7	15	0.4	25	11	AE90419
8	15	0.4	25	13	AE331633
9	15	0.4	25	13	AZ345569
10	15	0.4	28	13	AE345649
11	15	0.4	28	13	AE42669
12	15	0.4	29	13	AE804183
					AE666929 IM0549013
					AE416392 IM01918872
					AE430288 IM0216922
					AE238219 IM0128614
					AE954229 IM0159014
					AE764246 IM0563308
					AE90419 Y017611.01
					AZ331633 IM0059N111
					AZ345569 IM0080118
					AZ345649 IM0080134
					AE42669 IM02123314
					AE804183 IM0061N22

C	13	14	14	0.4	19	13	A5333.223	A5333.223	18956.2408	C21.228	HD85969.223
C	14	14	14	0.4	19	13	A5333.223	A5333.223	18956.2408	C21.228	HD85969.223
C	15	14	14	0.4	22	13	A5333.223	A5333.223	18956.2408	C21.228	HD85969.223
C	16	14	14	0.4	22	13	A5333.223	A5333.223	18956.2408	C21.228	HD85969.223
C	17	14	14	0.4	22	13	A5333.223	A5333.223	18956.2408	C21.228	HD85969.223
C	18	14	14	0.4	25	13	A5345.473	A5345.473	19004.4008	A5345.473	19004.4008
C	19	14	14	0.4	25	13	A5345.473	A5345.473	19004.4008	A5345.473	19004.4008
C	20	14	14	0.4	25	13	A5345.473	A5345.473	19004.4008	A5345.473	19004.4008
C	21	14	14	0.4	27	13	A5416.143	A5416.143	19015.6134	A5416.143	19015.6134
C	22	14	14	0.4	27	13	A5416.143	A5416.143	19015.6134	A5416.143	19015.6134
C	23	14	14	0.4	27	13	A5416.143	A5416.143	19015.6134	A5416.143	19015.6134
C	24	14	14	0.4	27	13	A5416.143	A5416.143	19015.6134	A5416.143	19015.6134
C	25	14	14	0.4	28	13	A5416.143	A5416.143	19015.6134	A5416.143	19015.6134
C	26	14	14	0.4	28	13	A5416.143	A5416.143	19015.6134	A5416.143	19015.6134
C	27	14	14	0.4	29	13	A5439.429	A5439.429	19026.4102	A5439.429	19026.4102
C	28	14	14	0.4	30	13	A5439.429	A5439.429	19026.4102	A5439.429	19026.4102
C	29	14	14	0.4	30	13	A5439.429	A5439.429	19026.4102	A5439.429	19026.4102
C	30	14	14	0.4	30	13	A5439.429	A5439.429	19026.4102	A5439.429	19026.4102
C	31	14	14	0.4	30	13	A5439.429	A5439.429	19026.4102	A5439.429	19026.4102
C	32	14	14	0.4	30	13	A5439.429	A5439.429	19026.4102	A5439.429	19026.4102
C	33	14	14	0.4	30	13	A5439.429	A5439.429	19026.4102	A5439.429	19026.4102
C	34	14	14	0.4	30	13	A5439.429	A5439.429	19026.4102	A5439.429	19026.4102
C	35	14	14	0.4	30	13	A5439.429	A5439.429	19026.4102	A5439.429	19026.4102
C	36	14	14	0.4	30	13	A5439.429	A5439.429	19026.4102	A5439.429	19026.4102
C	37	14	14	0.4	30	13	A5439.429	A5439.429	19026.4102	A5439.429	19026.4102
C	38	14	14	0.4	30	13	A5439.429	A5439.429	19026.4102	A5439.429	19026.4102
C	39	14	14	0.4	30	13	A5439.429	A5439.429	19026.4102	A5439.429	19026.4102
C	40	14	14	0.4	30	13	A5439.429	A5439.429	19026.4102	A5439.429	19026.4102
C	41	14	14	0.4	30	13	A5439.429	A5439.429	19026.4102	A5439.429	19026.4102
C	42	14	14	0.4	30	13	A5439.429	A5439.429	19026.4102	A5439.429	19026.4102
C	43	14	14	0.4	30	13	A5439.429	A5439.429	19026.4102	A5439.429	19026.4102
C	44	14	14	0.4	30	13	A5439.429	A5439.429	19026.4102	A5439.429	19026.4102
C	45	14	14	0.4	30	13	A5439.429	A5439.429	19026.4102	A5439.429	19026.4102

ALIGNMENT

RESULT	1
DEFINITION	25 bp DNA GSS 14-DEC-2000
ACCESSION	AF666829
VERSION	1
KEYWORDS	mouse, 10kb plasmid library, Mus musculus genomic clone, U904180,49017 F, 18A sequence.
SOURCE	house mouse, GSS.
ORGANISM	Mus musculus
REFERENCE	Eurarchaea; Metazoa; Chordata; Chordata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus; 1 (bases 1 to 25)
AUTHORS	Burns, D., Ayala, A., Harber, M., Pavesi, L., Fayal, B., Hamill, C., Coleman, J., Zavadzky, S., Mahmood, M., Moench, R., Polster, J., Kelly, L., Jose, M., Jose, E., Stokes, P., Linney, A., von Niederhausern, A. and Wright, P., Weiss, R.
TITLE	Mouse whole genome scaffolding with paired end reads from 10kb plasmid inserts
JOURNAL	Unpublished (2000)
COMMENT	Contact: Robert B. Weiss University of Utah Economic Center University of Utah Box 309, Economic Biol, econ, Research Bldg., 20 S. 2400 E., Salt, U 84112, USA Tel: 801 585 5606 Fax: 801 525 7177 Email: dduong@genetics.utah.edu Insert Length: 12000 Std Error: 0.00 Platlet: 0549 Row: 6 Column: 17 Seq primer: GGTGTGAATCAACGACGACAG Class: plasmid ends High quality sequence steps: 25. Low quality/Qualifiers: 1, 25

SOURCE

1. 25
/organism "Mus musculus"
/strain "C57BL/6J"
/db_xref "taxon:10090"
/clone "M00080118"
/vector "pUC19" plasmid library

BASE COUNT

12 a 7 c 0 g 6 t

ORIGIN

1. 25
/organism "Mus musculus"
/strain "C57BL/6J"
/db_xref "taxon:10090"
/clone "M00080118"
/vector "pUC19" plasmid library
/sex "Male"
/lab_host "E. coli strain XL10-gold, TF-resistant, F"
/note "Vector (pUC19) purified genomic DNA from M. musculus (C57BL/6J male) was obtained from the Jackson Laboratory Mouse DNA Resource
(http://www.jax.org/resources/10090-240027). The DNA was hydrolytically sheared by repeated passage through a 0.005 inch orifice at constant velocity. The sheared DNA was blunt end repaired with T4 DNA polymerase and T4 polynucleotide kinase. Adaptor oligonucleotides were ligated to the blunt ends in high molar excess. The adaptor DNA was purified and size selected for a 9.5 to 10.5 kb range using preparative agarose gel electrophoresis. Vector DNA was prepared from a derivative of pMD4 (G114732114[AF129072.1]), a copy number inducible derivative of plasmid p1. The vector was ligated with adaptors complementary to the insert adaptors and purified. The sheared, adaptor mouse DNA was annealed to adaptor vector DNA, and transformed into chemically competent E. coli XL10-gold (Stratagene) cells and selected for ampicillin resistance."

Query Match

Best Local Similarity 0.48; Score 15; DB 13; Length 25;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3073 ttattattattatt 3087
|||||

Db 24 ttattattattatt 10

RESULT 10

AZ445640 28 bp DNA GSS 29-SEP-2000
LOCUS
DEFINITION
clone U00C1M0080124 F, DNA sequence.

ACCESSION
AZ445640.1 GI:10424877

VERSION

GSS.

KEYWORDS

house mouse;

ORGANISM

REFERENCE

AUTHORS

TITLE

JOURNAL

COMMENT

1 (bases 1 to 28)
Dunn, D., Ayoub, A., Barber, M., Beacorn, T., Dival, B., Hamill, C., Islam, H., Jongqarte, S., Mahmoud, M., Meenen, E., Pedersen, T., Reilly, M., Rose, M., Rose, R., Stokes, R., Tinney, A., von Niederhausern, A., and Wright, D., Weiss, R.
Mouse whole genome scaffolding with paired end reads from 10kb plasmid inserts
Unpublished (2000)
Contact: Robert B. Weiss
University of Utah
Rm. 408, Biomedical Polymers Research Bldg., 20 S. 2030 E., Salt, UT 84112, USA
Tel: 801 585 5606
Fax: 801 585 7177
Email: dunn@genetics.utah.edu
Insert length: 10000 Std Error: 0.00
Plate: 0080 row: 1 column: 24
Seq primer: GCTTGTAAACGACGCGTACT
Class: plasmid ends
High quality sequence stop: 28.

FEAT RES

SOURCE

location/qualifiers
1. 28

BASE COUNT

6 a 0 c 0 g 22 t

ORIGIN

1. 28
/organism "Mus musculus"
/strain "C57BL/6J"
/db_xref "taxon:10090"
/clone "M00080118"
/vector "pUC19" plasmid library
/sex "Male"
/lab_host "E. coli strain XL10-gold, TF-resistant, F"
/note "Vector (pUC19) purified genomic DNA from M. musculus (C57BL/6J male) was obtained from the Jackson Laboratory Mouse DNA Resource
(http://www.jax.org/resources/10090-240027). The DNA was hydrolytically sheared by repeated passage through a 0.005 inch orifice at constant velocity. The sheared DNA was blunt end repaired with T4 DNA polymerase and T4 polynucleotide kinase. Adaptor oligonucleotides were ligated to the blunt ends in high molar excess. The adaptor DNA was purified and size selected for a 9.5 to 10.5 kb range using preparative agarose gel electrophoresis. Vector DNA was prepared from a derivative of pMD4 (G114732114[AF129072.1]), a copy number inducible derivative of plasmid p1. The vector was ligated with adaptors complementary to the insert adaptors and purified. The sheared, adaptor mouse DNA was annealed to adaptor vector DNA, and transformed into chemically competent E. coli XL10-gold (Stratagene) cells and selected for ampicillin resistance."

Query Match

Best Local Similarity 0.48; Score 15; DB 13; Length 28;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3073 ttattattattatt 3087
|||||

Db 2 ttattattattatt 16

RESULT 11

AZ428669 28 bp DNA GSS 04-SEP-2000
LOCUS
DEFINITION
clone U00C1M0212614 F, DNA sequence.

ACCESSION
AZ428669

VERSION

AZ428669.1 GI:10552682

KEYWORDS

house mouse;

ORGANISM

REFERENCE

AUTHORS

TITLE

JOURNAL

COMMENT

1 (bases 1 to 28)
Dunn, D., Ayoub, A., Barber, M., Beacorn, T., Dival, B., Hamill, C., Islam, H., Jongqarte, S., Mahmoud, M., Meenen, E., Pedersen, T., Reilly, M., Rose, M., Rose, R., Stokes, R., Tinney, A., von Niederhausern, A., and Wright, D., Weiss, R.
Mouse whole genome scaffolding with paired end reads from 10kb plasmid inserts
Unpublished (2000)
Contact: Robert B. Weiss
University of Utah
Rm. 408, Biomedical Polymers Research Bldg., 20 S. 2030 E., Salt, UT 84112, USA
Tel: 801 585 5606
Fax: 801 585 7177
Email: dunn@genetics.utah.edu
Insert length: 10000 Std Error: 0.00
Plate: 0212 row: 6 column: 14
Seq primer: GCTTGTAAACGACGCGTACT
Class: plasmid ends

FEATURES High quality sequence stop: 28.
Location/Qualifiers

1..28

/organism="Mus musculus"

/strain="C57BL/6J"

/db_xref="taxon:10090"

/clone="0052M064422"

/oligo_1lb="Mouse 10kb plasmid library"

/sex="Male"

/lab_host="E. coli strain XL10-Gold, II-resistant, F"

/note="Vector: pMD2007 Purified genomic DNA from M. musculus C57BL/6J (male) was obtained from the Jackson Laboratory Mouse DNA Resource

(http://www.jax.org/mouse-dna-resource/)

The DNA was hydrolyzed and sheared by repeated passage through a 0.005 inch orifice at constant velocity. The sheared DNA was blunt end-repaired with T4 DNA polymerase and T4 polynucleotide kinase. Adaptor oligonucleotides were ligated to the blunt ends in high molar excess. The adaptor DNA was purified and size-selected for a 9.5 to 10.5 kb range using preparative agarose gel electrophoresis. Vector DNA was prepared from a derivative of pMD20 (3117221141bAF12072.1), a copy number inducible derivative of plasmid p1. The vector was ligated with adaptors complementary to the insert adaptors and purified. The sheared, adaptor mouse DNA was annealed to adaptor vector DNA and transformed into chemically-competent F. coli XL10-Gold (Stratagene) cells and selected for ampicillin resistance."

BASE COUNT 18 a 5 c 1 g 4 t

ORIGIN

Query Match 0.48; Score 15; DB 13; Length 28;

Best Local Similarity 100.0%; Pred. No. 7.7e+04;

Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3073 ttattattattat 3087

DB 27 ttattattattat 13

RESULT 12

LOCUS AZ804183

DEFINITION 29 bp. DNA

VERSION 1

ACCESSION AZ804183

KEYWORDS GSS.

SOURCE house mouse.

ORGANISM Mus musculus

REFERENCE Eukaryota: Chordata: Vertebrata: Euteleostomi: Mammalia: Eutheria: Rodentia: Scurionatuli: Muridae: Murinae: Mus.

AUTHORS Dunn, D., Aoyagi, A., Barber, M., Beaumont, T., Duvall, B., Hamill, P., Islam, H., Langstaffe, S., Mahmood, M., Menden, F., Redinger, T., Reilly, M., Rose, M., Rose, R., Stokes, R., Tinney, A., von Niederhausern, A. and Wright, D., Weiss, R.

TITLE Mouse whole genome scaffolding with paired end reads from 10kb

plasmid inserts

JOURNAL Unpublished (2000)

COMMENT Contact: Robert B. Weiss

University of Utah

Genome Center

1000 E. 200 S. 200 S. 200 S.

84112, USA

Tel: 801 585 5606

Fax: 801 585 7177

Email: ddunn@genetics.utah.edu

Insert Length: 10000 Std Error: 0.00

Plate: 0064 Row: N Column: 22

Seq primer: CACACGACACACGATATGAC

FEATURES High quality sequence stop: 29.
Location/Qualifiers

1..29

/organism="Mus musculus"

/strain="C57BL/6J"

/db_xref="taxon:10090"

/clone="0052M064422"

/oligo_1lb="Mouse 10kb plasmid library"

/sex="Male"

/lab_host="E. coli strain XL10-Gold, II-resistant, F"

/note="Vector: pMD2007 Purified genomic DNA from M. musculus C57BL/6J (male) was obtained from the Jackson Laboratory Mouse DNA Resource

(http://www.jax.org/mouse-dna-resource/)

The DNA was hydrolyzed and sheared by repeated passage through a 0.005 inch orifice at constant velocity. The sheared DNA was blunt end-repaired with T4 DNA polymerase and T4 polynucleotide kinase. Adaptor oligonucleotides were ligated to the blunt ends in high molar excess. The adaptor DNA was purified and size-selected for a 9.5 to 10.5 kb range using preparative agarose gel electrophoresis. Vector DNA was prepared from a derivative of pMD20 (3117221141bAF12072.1), a copy number inducible derivative of plasmid p1. The vector was ligated with adaptors complementary to the insert adaptors and purified. The sheared, adaptor mouse DNA was annealed to adaptor vector DNA and transformed into chemically-competent F. coli XL10-Gold (Stratagene) cells and selected for ampicillin resistance."

BASE COUNT 13 a 0 c 16 g 0 t

ORIGIN

Query Match 0.48; Score 15; DB 13; Length 29;

Best Local Similarity 100.0%; Pred. No. 7.7e+04;

Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1039 aaaaaaadaaaa 1054

DB 14 AAAAAAGGAGAGAA 28

RESULT 13

LOCUS AZ333223

DEFINITION 19 bp. DNA

VERSION 1

ACCESSION AZ333223

KEYWORDS GSS.

SOURCE house mouse.

ORGANISM Mus musculus

REFERENCE Eukaryota: Chordata: Vertebrata: Euteleostomi: Mammalia: Eutheria: Rodentia: Scurionatuli: Muridae: Murinae: Mus.

AUTHORS Dunn, D., Aoyagi, A., Barber, M., Beaumont, T., Duvall, B., Hamill, P., Islam, H., Langstaffe, S., Mahmood, M., Menden, F., Redinger, T., Reilly, M., Rose, M., Rose, R., Stokes, R., Tinney, A., von Niederhausern, A. and Wright, D., Weiss, R.

TITLE Mouse whole genome scaffolding with paired end reads from 10kb

plasmid inserts

JOURNAL Unpublished (2000)

COMMENT Contact: Robert B. Weiss

University of Utah

Genome Center

1000 E. 200 S. 200 S. 200 S.

84112, USA

Tel: 801 585 5606

Fax: 801 585 7177

Email: ddunn@genetics.utah.edu

Insert Length: 10000 Std Error: 0.00

Plate: 0062 Row: P Column: 08

Seq primer: GGTCTTAAAGACGACGACAT

Class: plasmid ends
High quality sequence steps: 19

FEATURES

SOURCE

1..19

/organism "Mus musculus"

/strain "c57Bl/6J"

/db_xref "taxon:10090"

/clone "M00C1M0062P08"

/cclone_lib "Mouse 10kb plasmid 000C1M library"

/sex "Male"

/lab_host "E. coli strain XL10-gold, T1-resistant, F"

/note "Vector: pMD42uv; purified genomic DNA from M. musculus (c57Bl/6J (male) was obtained from the Jackson Laboratory Mouse DNA Resource"

(<http://www.jax.org/resources/document/s/dnares/>). The DNA

was hydrodynamically sheared by repeated passage through a

0.005 inch orifice at constant velocity. The sheared DNA

was blunt end-repaired with T4 DNA polymerase and T4

polynucleotide kinase. Adaptor oligonucleotides were

ligated to the blunt ends in high molar excess. The

adapted DNA was purified and size-selected for a 9.5 to

10.5 kb range using preparative agarose gel

electrophoresis. Vector DNA was prepared from a derivative

of pMD42 (q1147321141b1AF129072.1), a copy number

inducible derivative of plasmid R1. The vector was ligated

with adaptors complementary to the insert adaptors and

purified. The sheared, adapted mouse DNA was annealed to

adapted vector DNA, and transformed into

chemically competent E. coli XL10-Gold (Stratagene) cells

and selected for ampicillin resistance."

BASE COUNT

5 a 1 c 0 g 13 t

ORIGIN

Query Match

Best Local Similarity 100.0%; Pred. No. 2,367052

Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

cy 4073 TATTATTATTAT 4086

db 2 TATTATTATTAT 15

RESULT 14

LOCUS

c21208 20 bp mRNA EST 24 OCT-1996

DEFINITION

h006850002245 Homo adult (K. Okubo)

ACCESSION

VERSION

KEYWORDS

SOURCE

ORGANISM

REFERENCE

AUTHORS

TITLE

JOURNAL

COMMENT

FEATURES

SOURCE

ORIGIN

Query Match

Best Local Similarity 100.0%; Pred. No. 2,367052

Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

cy 4073 TATTATTATTAT 4086

db 2 TATTATTATTAT 15

RESULT 14

c21208 20 bp mRNA EST 24 OCT-1996

h006850002245 Homo adult (K. Okubo)

ACCESSION

c21208

c21208.1 G1:1642418

EST

homo sapiens

Enkaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

Mammalia; Eutheria; Primates; Catarrhini; Hominoidea; Homo;

1 (bases 1 to 20)

Okubo, K.

bioRxiv

bioRxiv

bioRxiv

bioRxiv

bioRxiv

bioRxiv

bioRxiv

SOURCE

1..20

/organism "Homo sapiens"

/db_xref "taxon:9606"

/cclone_lib "Human adult (K. Okubo)"

/cclone_lib "Human adult (K. Okubo)"

/sex "Male"

/lab_host "E. coli strain XL10-gold, T1-resistant, F"

/note "Vector: pMD42uv; purified genomic DNA from M. musculus (c57Bl/6J (male) was obtained from the Jackson Laboratory Mouse DNA Resource"

(<http://www.jax.org/resources/document/s/dnares/>). The DNA

was hydrodynamically sheared by repeated passage through a

0.005 inch orifice at constant velocity. The sheared DNA

was blunt end-repaired with T4 DNA polymerase and T4

polynucleotide kinase. Adaptor oligonucleotides were

ligated to the blunt ends in high molar excess. The

adapted DNA was purified and size-selected for a 9.5 to

10.5 kb range using preparative agarose gel

electrophoresis. Vector DNA was prepared from a derivative

of pMD42 (q1147321141b1AF129072.1), a copy number

inducible derivative of plasmid R1. The vector was ligated

with adaptors complementary to the insert adaptors and

purified. The sheared, adapted mouse DNA was annealed to

adapted vector DNA, and transformed into

chemically competent E. coli XL10-Gold (Stratagene) cells

and selected for ampicillin resistance."

bioRxiv

bioRxiv

bioRxiv

bioRxiv

bioRxiv

bioRxiv

bioRxiv

bioRxiv

bioRxiv

bioRxiv

bioRxiv

bioRxiv

bioRxiv

bioRxiv

bioRxiv

bioRxiv

bioRxiv

bioRxiv

bioRxiv

bioRxiv

bioRxiv

bioRxiv

bioRxiv

bioRxiv

bioRxiv

bioRxiv

bioRxiv

bioRxiv

bioRxiv

bioRxiv

bioRxiv

electroporation. Vector DNA was prepared from a derivative of pMD42 (4147321414b/AF129072.1), a copy-number inducible derivative of plasmid R1. The vector was ligated with adaptors complementary to the insert adaptors and purified. The sheared, adapted mouse DNA was annealed to adaptor vector DNA, and transformed into chemically competent *E. coli* XL10-Gold (Stratagene) cells and selected for ampicillin resistance.

BASE COUNT

6 a 4 c 9 g 6 t

ORIGIN

Query Match 0.48; Score 14; DB 14; Length 25;

Post Local Similarity 100.0%; Pred. No. 2; E=0.05; Mismatches 0; Indels 0; Gaps 0;

Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

UY 4432 cttatggtttgga 4445

DB 4 cttatggtttgga 17

RESULT 18

AZ44547.1 25 bp RNA GSS 29 SEP 2000

LOCUS 1M0080P09F Mouse 10kb plasmid U96C1M library Mus musculus genomic

clone U96C1M0080P09 F, DNA sequence.

AZ44547.1

VERSION AZ44547.1 GI:10424710

KEYWORDS GSS.

SOURCE house mouse.

ORGANISM Mus musculus

REFERENCE Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;

Mammalia; Eutheria; Rodentia; Sclerogastri; Muridae; Murinae; Mus.

AUTHORS Dunn, D., Ayvaz, A., Barber, M., Beatty, T., Daval, B., Hamill, C.,

Islam, H., Langsdorf, S., Mahmoud, M., Menon, E., Petersen, J., Kelly,

M., Rose, M., Rose, R., Stokes, R., Tinney, A., von Niederhausern, A.

and Wright, D., Weiss, R.

Mouse whole genome scaffolding with paired end reads from 10kb

plasmid inserts

Plasmid inserts

Plasmid inserts

Plasmid inserts

Plasmid inserts

Plasmid inserts

Plasmid inserts

Plasmid inserts

Plasmid inserts

Plasmid inserts

Plasmid inserts

Plasmid inserts

Plasmid inserts

Plasmid inserts

Plasmid inserts

Plasmid inserts

Plasmid inserts

Plasmid inserts

Plasmid inserts

Plasmid inserts

Plasmid inserts

Plasmid inserts

Plasmid inserts

Plasmid inserts

Plasmid inserts

Plasmid inserts

Plasmid inserts

Plasmid inserts

Plasmid inserts

Plasmid inserts

Plasmid inserts

Plasmid inserts

Plasmid inserts

Plasmid inserts

Plasmid inserts

Plasmid inserts

Plasmid inserts

Plasmid inserts

Plasmid inserts

Plasmid inserts

Plasmid inserts

Plasmid inserts

Plasmid inserts

Plasmid inserts

Plasmid inserts

Plasmid inserts

10.5 kb range using preparative agarose gel electroporation. Vector DNA was prepared from a derivative of pMD42 (4147321414b/AF129072.1), a copy-number inducible derivative of plasmid R1. The vector was ligated with adaptors complementary to the insert adaptors and purified. The sheared, adapted mouse DNA was annealed to adaptor vector DNA, and transformed into chemically competent *E. coli* XL10-Gold (Stratagene) cells and selected for ampicillin resistance.

BASE COUNT

14 a 3 c 1 g 7 t

ORIGIN

Query Match 0.48; Score 14; DB 14; Length 25;

Post Local Similarity 100.0%; Pred. No. 2; E=0.05; Mismatches 0; Indels 0; Gaps 0;

Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

UY 4073 ttatttatttatt 4086

DB 24 ttatttatttatt 11

RESULT 19

AZ641910 25 bp RNA GSS 14 SEP 2000

LOCUS 1M0504N09F Mouse 10kb plasmid U96C1M library Mus musculus genomic

clone U96C1M0504N09 F, DNA sequence.

AZ641910

VERSION AZ641910.1 GI:11766449

KEYWORDS GSS.

SOURCE house mouse.

ORGANISM Mus musculus

REFERENCE Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;

Mammalia; Eutheria; Rodentia; Sclerogastri; Muridae; Murinae; Mus.

AUTHORS Dunn, D., Ayvaz, A., Barber, M., Beatty, T., Daval, B., Hamill, C.,

Islam, H., Langsdorf, S., Mahmoud, M., Menon, E., Petersen, J., Kelly,

M., Rose, M., Rose, R., Stokes, R., Tinney, A., von Niederhausern, A.

and Wright, D., Weiss, R.

Mouse whole genome scaffolding with paired end reads from 10kb

plasmid inserts

Plasmid inserts

Plasmid inserts

Plasmid inserts

Plasmid inserts

Plasmid inserts

Plasmid inserts

Plasmid inserts

Plasmid inserts

Plasmid inserts

Plasmid inserts

Plasmid inserts

Plasmid inserts

Plasmid inserts

Plasmid inserts

Plasmid inserts

Plasmid inserts

Plasmid inserts

Plasmid inserts

Plasmid inserts

Plasmid inserts

Plasmid inserts

Plasmid inserts

Plasmid inserts

Plasmid inserts

Plasmid inserts

Plasmid inserts

Plasmid inserts

Plasmid inserts

Plasmid inserts

Plasmid inserts

Plasmid inserts

Plasmid inserts

Plasmid inserts

Plasmid inserts

Plasmid inserts

Plasmid inserts

Plasmid inserts

Plasmid inserts

Plasmid inserts

Plasmid inserts

Plasmid inserts

Plasmid inserts

Plasmid inserts

Plasmid inserts

Plasmid inserts

adapted DNA was purified and size-selected for a 9.5 to 10.5 kb range using preparative agarose gel electrophoresis. Vector DNA was prepared from a derivative of pMD2 (314722114) (pMD2072.1), a copy number inducible derivative of plasmid p1. The vector was ligated with adaptors complementary to the insert adaptors and purified. The sheared, adapted mouse DNA was annealed to adapted vector DNA, and transformed into chemically competent *E. coli* XL10-Gold (Stratagene) cells and selected for ampicillin resistance.

BASE COUNT
ORIGIN
9 a 3 c 2 g 11 t

Query Match
Best Local Similarity 100.0%; Prot No 23005;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0.

QY 3248 atattatcgaatt 3261
|||||
Db 1 AATTATTCGATT 14

RESULT 20
AZ840538 25 bp DNA GSS 20-FEB-2001
LOCUS 2010M10F Mouse 10kb plasmid U00C1M library Mus musculus genomic
ACCESSION AZ840538
VERSION AZ840538.1 GI:13010446
KEYWORDS GSS.
SOURCE house mouse.
ORGANISM Mus musculus

REFERENCE
AUTHORS
1 (bases 1 to 25)
Punn,D., Ayagi,A., Barber,M., Beermann,T., Duval,F., Hamill,C.,
Islam,H., Longacre,S., Mahmoud,M., Meenen,E., Pedersen,T., Reilly,
M., Rose,M., Rose,R., Stokes,R., Tinney,A., von Niederhausern,A.
and Wright,T., Weiss,P.

TITLE
Mouse whole genome scaffolding with paired end reads from 10kb
plasmid inserts
JOURNAL
COMMENT
Unpublished (2000)
Contact: Robert B. Weiss
University of Utah Genome Center
Rm 308, Biomedical Polymers Research Bldg., 20 S. 2030 E., SLC, UT
84112, USA
Tel: 801 585 5606
Fax: 801 585 7177
Email: ddunn@genetics.utah.edu

Insert Length: 10000 Std Error: 0.00
Plate: 0138 row: F column: 10
Seq primer: CGTTGTAAACGACGCGCCACT
Class: plasmid ends
High quality sequence stop: 25.
Location/Qualifiers

FEATURES
source

1. 25
/organism="Mus musculus"
/strain="C57BL/6J"
/db_xref="taxon:10090"
/clone="U00C2M0191G14"
/clone_lib="Mouse 10kb plasmid U00C1M library"
/sex="Male"
/lab_hosts="E. coli strain XL10-Gold, T1-resistant, F-"
/note="Vector (10kb) and paired genomic DNA from M.
musculus C57BL/6J (male) was obtained from the Jackson
Laboratory Mouse DNA Resource
(http://www.jax.org/resources/common-sequences/). The DNA
was hydrodynamically sheared by repeated passage through a
0.005 inch orifice at constant velocity. The sheared DNA
was blunt end repaired with T4 DNA polymerase and T4
polynucleotide kinase. Adaptor oligonucleotides were

ligated to the blunt ends in high molar excess. The
adapted DNA was purified and size-selected for a 9.5 to
10.5 kb range using preparative agarose gel
electrophoresis. Vector DNA was prepared from a derivative
of pMD2 (314722114) (pMD2072.1), a copy number
inducible derivative of plasmid p1. The vector was ligated
with adaptors complementary to the insert adaptors and
purified. The sheared, adapted mouse DNA was annealed to
adapted vector DNA, and transformed into
chemically competent *E. coli* XL10-Gold (Stratagene) cells
and selected for ampicillin resistance.

BASE COUNT
ORIGIN
10 a 0 c 15 g 0 t

Query Match
Best Local Similarity 100.0%; Prot No 23005;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0.

QY 1149 ggaagaagagagag 1162
|||||
Db 1 GGGAGAGAGAGAG 14

RESULT 21
AZ416143 27 bp DNA GSS 01-NOV-2000
LOCUS 1M0191G14F Mouse 10kb plasmid U00C1M library Mus musculus genomic
ACCESSION AZ416143
VERSION AZ416143.1 GI:10540156
KEYWORDS GSS.
SOURCE house mouse.
ORGANISM Mus musculus

REFERENCE
AUTHORS
1 (bases 1 to 27)
Punn,D., Ayagi,A., Barber,M., Beermann,T., Duval,F., Hamill,C.,
Islam,H., Longacre,S., Mahmoud,M., Meenen,E., Pedersen,T., Reilly,
M., Rose,M., Rose,R., Stokes,R., Tinney,A., von Niederhausern,A.
and Wright,T., Weiss,P.

TITLE
Mouse whole genome scaffolding with paired end reads from 10kb
plasmid inserts
JOURNAL
COMMENT
Unpublished (2000)
Contact: Robert B. Weiss
University of Utah Genome Center
Rm. 308, Biomedical Polymers Research Bldg., 20 S. 2030 E., SLC, UT
84112, USA
Tel: 801 585 5606
Fax: 801 585 7177
Email: ddunn@genetics.utah.edu

Insert Length: 10000 Std Error: 0.00
Plate: 0191 row: G column: 14
Seq primer: CGTTGTAAACGACGCGCCACT
Class: plasmid ends
High quality sequence stop: 27
Location/Qualifiers

FEATURES
source

1. 27
/organism="Mus musculus"
/strain="C57BL/6J"
/db_xref="taxon:10090"
/clone="U00C2M0191G14"
/clone_lib="Mouse 10kb plasmid U00C1M library"
/sex="Male"
/lab_hosts="E. coli strain XL10-Gold, T1-resistant, F-"
/note="Vector (10kb) and paired genomic DNA from M.
musculus C57BL/6J (male) was obtained from the Jackson
Laboratory Mouse DNA Resource
(http://www.jax.org/resources/common-sequences/). The DNA
was hydrodynamically sheared by repeated passage through a
0.005 inch orifice at constant velocity. The sheared DNA
was blunt end repaired with T4 DNA polymerase and T4

6.005 inch orifice at constant velocity. The sheared DNA was blunt end repaired with T4 DNA polymerase and T4 polynucleotide kinase. Adaptor oligonucleotides were ligated to the blunt ends in high molar excess. The adaptor DNA was purified and size selected for a 9.5 to 10.5 kb range using preparative agarose gel electrophoresis. Vector DNA was prepared from a derivative of pMD42 (g1147321149bA120972.1), a copy number inducible derivative of plasmid R1. The vector was ligated with adaptors complementary to the insert adaptors and purified. The sheared, adaptor mouse DNA was annealed to adaptor vector DNA, and transformed into chemically competent *E. coli* XL10-Gold (Stratagene) cells and selected for ampicillin resistance.

BASE COUNT
ORIGIN
0 a 16 c 0 g 11 t

Query Match
Best local Similarity 100.0%; Prod. No. 2.4e+05;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2146 cctctctctctctc 2159
DB 14 CCTCTCTCTCTCTC 27

RESULT 24
LOCUS AC942002 27 bp DNA GSS 26 APR 2000
DEFINITION DMD20205E Mouse 10kb Plasmid U9002M library Mus musculus genomic
clone DMD20205E20205E R, DNA sequence.
AC942002
VERSION AC942002.1 GI:11780498
KEYWORDS GSS.
SOURCE house mouse.
ORGANISM Mus musculus
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sclerogamali; Muridae; Murinae; Mus;
1 (bases 1 to 27)
AUTHORS Dunn, D.; Ayoub, A.; Barber, M.; Beacorn, T.; Dural, B.; Hamill, C.;
Islam, H.; Longacre, S.; Mahmoud, M.; Meenen, E.; Pedersen, J.; Kelly,
M.; Rose, M.; Rose, R.; Stokes, F.; Tinney, A.; von Niederhausern, A.
and Wright, D.; Weiss, R.
TITLE Mouse whole genome scaffolding with paired end reads from 10kb
plasmid inserts
JOURNAL Unpublished (2000)
COMMENT Contact: Robert R. Weiss
University of Utah Genome Center
Rm. 308, Biomedical Polymers Research Bldg., 20 S. 2030 E., SLC, UT
84112, USA
Tel: 801 585 5606
Fax: 801 585 7177
Email: dunn@genetics.utah.edu
Insert Length: 10000 Std Error: 0.00
Plate: 0202 row: B column: 03
Seq primer: CATTGTAACACACGGCCACT
Class: plasmid ends
High quality sequence stop: 27.
Location/Qualifiers
1..27
/organism="Mus musculus"
/strain="G57H/41"
/clone="DMD20205E20205E"
/clone_lib="Mouse 10kb plasmid U9002M library"
/sex="Male"
/lab_host="E. coli strain XL10-Gold, T1-resistant, F"
/note="Vector: pMD42nv; Purified genomic DNA from M.
musculus G57H/41 (female) was obtained from the Jackson
Laboratory Mouse DNA Resource
(http://www.jax.org/resources/Genomic%20DNA%20) The DNA

Query Match
Best local Similarity 100.0%; Prod. No. 2.4e+05;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1040 cctctctctctctc 1054
DB 19 GACATGACACACATA 6

RESULT 25
LOCUS AC656764 28 bp DNA GSS 14 APR 2000
DEFINITION DMD20205E Mouse 10kb Plasmid U9002M library Mus musculus genomic
clone DMD20205E20205E R, DNA sequence.
AC656764
VERSION AC656764.1 GI:11784910
KEYWORDS GSS.
SOURCE house mouse.
ORGANISM Mus musculus
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sclerogamali; Muridae; Murinae; Mus;
1 (bases 1 to 28)
AUTHORS Dunn, D.; Ayoub, A.; Barber, M.; Beacorn, T.; Dural, B.; Hamill, C.;
Islam, H.; Longacre, S.; Mahmoud, M.; Meenen, E.; Pedersen, J.; Kelly,
M.; Rose, M.; Rose, R.; Stokes, F.; Tinney, A.; von Niederhausern, A.
and Wright, D.; Weiss, R.
TITLE Mouse whole genome scaffolding with paired end reads from 10kb
plasmid inserts
JOURNAL Unpublished (2000)
COMMENT Contact: Robert R. Weiss
University of Utah Genome Center
Rm. 308, Biomedical Polymers Research Bldg., 20 S. 2030 E., SLC, UT
84112, USA
Tel: 801 585 5606
Fax: 801 585 7177
Email: dunn@genetics.utah.edu
Insert Length: 10000 Std Error: 0.00
Plate: 0512 row: F column: 05
Seq primer: CACATGACACACACGTAATATAT
Class: plasmid ends
High quality sequence stop: 28.
Location/Qualifiers
1..28
/organism="Mus musculus"
/strain="G57H/41"
/clone="DMD20205E20205E"
/clone_lib="Mouse 10kb plasmid U9002M library"
/sex="Male"
/lab_host="E. coli strain XL10-Gold, T1-resistant, F"
/note="Vector: pMD42nv; Purified genomic DNA from M.
musculus G57H/41 (female) was obtained from the Jackson
Laboratory Mouse DNA Resource
(http://www.jax.org/resources/Genomic%20DNA%20) The DNA

was hydrolytically sheared by repeated passage through a 6.005 inch orifice at constant velocity. The sheared DNA was blunt end repaired with T4 DNA polymerase and T4 polynucleotide kinase. Adaptor oligonucleotides were ligated to the blunt ends in high molar excess. The adaptor DNA was purified and size selected for a 9.5 to 10.5 kb range using preparative agarose gel electrophoresis. Vector DNA was prepared from a derivative of pMD42 (g1147321149bA120972.1), a copy number inducible derivative of plasmid R1. The vector was ligated with adaptors complementary to the insert adaptors and purified. The sheared, adaptor mouse DNA was annealed to adaptor vector DNA, and transformed into chemically competent *E. coli* XL10-Gold (Stratagene) cells and selected for ampicillin resistance.

(http://www.jax.org/resources/document/sdharcs/). The DNA was hydralyzed by sheared by repeated passage through a 0.005 inch orifice at constant velocity. The sheared DNA was blunt end-repaired with T4 DNA polymerase and T4 polynucleotide kinase. Adaptor oligonucleotides were ligated to the blunt ends in high molar excess. The adaptor DNA was purified and size-selected for a 9.5 to 10.5 kb range using preparative agarose gel electrophoresis. Vector DNA was prepared from a derivative of pMD42 (31147321141b/AP129072.1), a copy-number inducible derivative of plasmid R1. The vector was ligated with adaptors complementary to the insert adaptors and purified. The sheared, adaptor mouse DNA was annealed to adaptor vector DNA, and transformed into chemically-competent *E. coli* XL10-Gold (Stratagene) cells and selected for ampicillin resistance."

Query Match 0.48; Score 14; DB 13; Length 28;
Post Local Similarity 100.0%; Pred. No. 2.4e+05;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
CY 4004 attattattatt 3077
|||||
DB 8 ATTATTATTATT 21

RESULT 26
AZ783984 28 bp DNA GSS 16 FEB 2001
DEFINITION M00026M07F Mouse 10kb plasmid U06C1M library Mus musculus genomic
clone U06C1M0026M07 F, DNA sequence.
AZ783984
GSS:
1 GI:12919264
SOURCE house mouse.
ORGANISM Mus musculus.
Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
REFERENCE
1 (bases 1 to 28)
Dunn,D., Aoyagi,A., Barber,M., Beacorn,T., Duval,B., Hamil,C.,
Islam,H., Longacre,S., Mahmoud,M., Meenen,E., Pedersen,T., Reilly,
M., Rose,M., Rose,R., Stokes,R., Tinney,A., von Niederhausern,A.
and Wright,D., Weiss,R.
Mouse whole genome scaffolding with paired end reads from 10kb
plasmid inserts
Unpublished (2000)
Contact: Robert H. Weiss
University of Utah
Rm. 308, Biomedical Polymers Research Bldg., 20 S. 2030 E., Ste. UT
84112, USA
Tel: 801 585 5606
Fax: 801 585 7177
Email: ddunn@genetics.utah.edu
Insert Length: 10000 Std Error: 0.00
Plate: 0026 row: M column: 07
Seq primer: CATTGTAAATGACGCTACT
Class: plasmid ends
High quality sequence stop: 28.
Location/Qualifiers
1..28
/organism="Mus musculus"
/strain="ec37B/bj"

FEATURES
SOURCE
/db_xref="taxon:10090"
/clone="U06C1M0026M07"
/db_xref="taxon:10090"
/clone="U06C1M0229M22"
/sex="Male"
/lab_host="E. coli strain XL10-Gold, F+ resistant, F"
/note="Vector: pMD4207; purified genomic DNA from M.
musculus (57B1/bj) (male) was obtained from the Jackson

Laboratory Mouse DNA Resource
(http://www.jax.org/resources/document/sdharcs/). The DNA was hydralyzed by sheared by repeated passage through a 0.005 inch orifice at constant velocity. The sheared DNA was blunt end-repaired with T4 DNA polymerase and T4 polynucleotide kinase. Adaptor oligonucleotides were ligated to the blunt ends in high molar excess. The adaptor DNA was purified and size-selected for a 9.5 to 10.5 kb range using preparative agarose gel electrophoresis. Vector DNA was prepared from a derivative of pMD42 (31147321141b/AP129072.1), a copy-number inducible derivative of plasmid R1. The vector was ligated with adaptors complementary to the insert adaptors and purified. The sheared, adaptor mouse DNA was annealed to adaptor vector DNA, and transformed into chemically-competent *E. coli* XL10-Gold (Stratagene) cells and selected for ampicillin resistance."

Query Match 0.48; Score 14; DB 13; Length 28;
Post Local Similarity 100.0%; Pred. No. 2.4e+05;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
CY 1668 atttattattatt 1681
|||||
DB 15 GTTTGGGTTTGAGG 28

RESULT 27
AZ493429 29 bp DNA GSS 03 OCT-2000
DEFINITION M00229M22F Mouse 10kb plasmid U06C1M library Mus musculus genomic
clone U06C1M0229M22 R, DNA sequence.
AZ493429
GSS:
1 GI:10564442
SOURCE house mouse.
ORGANISM Mus musculus.
Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
REFERENCE
1 (bases 1 to 29)
Dunn,D., Aoyagi,A., Barber,M., Beacorn,T., Duval,B., Hamil,C.,
Islam,H., Longacre,S., Mahmoud,M., Meenen,E., Pedersen,T., Reilly,
M., Rose,M., Rose,R., Stokes,R., Tinney,A., von Niederhausern,A.
and Wright,D., Weiss,R.
Mouse whole genome scaffolding with paired end reads from 10kb
plasmid inserts
Unpublished (2000)
Contact: Robert H. Weiss
University of Utah
Rm. 308, Biomedical Polymers Research Bldg., 20 S. 2030 E., Ste. UT
84112, USA
Tel: 801 585 5606
Fax: 801 585 7177
Email: ddunn@genetics.utah.edu
Insert Length: 10000 Std Error: 0.00
Plate: 0229 row: M column: 22
Seq primer: CACACAGCAAAAGACTATGAC
Class: plasmid ends
High quality sequence stop: 29.
Location/Qualifiers
1..29
/organism="Mus musculus"
/strain="ec37B/bj"

FEATURES
SOURCE
/db_xref="taxon:10090"
/clone="U06C1M0229M22"
/db_xref="taxon:10090"
/clone="U06C1M0229M22"
/sex="Male"
/lab_host="E. coli strain XL10-Gold, F+ resistant, F"
/note="Vector: pMD4207; purified genomic DNA from M.
musculus (57B1/bj) (male) was obtained from the Jackson

musculus C57BL/6J (male) was obtained from the Jackson Laboratory Mouse DNA Resource (<http://www.jax.org/research/subcontractors.htm>). The DNA was hydrolyzed and then sheared by repeated passage through a 0.065 inch orifice at constant velocity. The sheared DNA was blunt end-repaired with T4 DNA polymerase and T4 polynucleotide kinase. Adaptor oligonucleotides were ligated to the blunt ends in high molar excess. The adaptor DNA was purified and size-selected for a 9.5 to 10.5 kb range using preparative agarose gel electrophoresis. Vector DNA was prepared from a derivative of pMD19 (1117321143E/AT12927.1), a 3887 number inducible derivative of pBluescript II. The vector was ligated with adaptors complementary to the insert adaptors and purified. The sheared adaptor mouse DNA was annealed to adaptor vector DNA, and transformed into chemically competent *E. coli* XL10-Gold (Stratagene) cells and selected for ampicillin resistance."

BASE COUNT 0 a 11 c 2 g 16 t
ORIGIN

Query Match 0.4% Score 14 DB 13 Length 29
Best local similarity 100.0% Pred. No. 24005
Matches 14: Conservative 0; Mismatches 0; Indels 0; Gaps 0

QY 1152 aagagagagagaga 1165
|||||
DB 19 AAGACAGAGAGAGA 6

RESULT 28
ACCESSION AZ335657 30 bp DNA GSS 29 SEP 2000
DEFINITION NM0065016 Mouse 10kb plasmid U00C1M library Mus musculus genomic
clone U00C1M0065016 R.1NA sequence.
ACCESSION AZ335657
VERSION AZ335657.1 GI:10404189
KEYWORDS GSS
SOURCE house mouse,
ORGANISM Mus musculus
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus;
1 (bases 1 to 30)
AUTHORS Dunn, D., Aoyagi, A., Barber, M., Bearson, T., Javal, H., Hamill, C.,
Islam, H., Longacre, S., Mahmoud, M., Meenan, E., Petersen, J., Reilly,
M., Rose, M., Rose, R., Stevens, R., Tingley, A., Van Norder, S., Weiss, P.
and Wright, D., Weiss, P.
TITLE Mouse whole genome scaffolding with paired end reads from 10kb
plasmid inserts
JOURNAL
COMMENT Published (2000)
Contact: Robert B. Weiss
University of Utah
Pm. 309, Biomedical Polymers Research Bldg., 29 N. 2000 E., Salt, UT
84112, USA
Tel.: 801 585 5606
Fax: 801 585 7177
Email: ddunn@genetics.utah.edu
Insert Length: 10000 Std Error: 0.00
Plate: 0065 Row: 0 Column: 16
Seq primer: CACACAGCAACACACATATGACG
Class: Plasmid ends
High quality sequence stop: 30.

FEATURES
Source location/Qualifiers
1..30
/organism="Mus musculus"
/strain="C57BL/6J"
/db_xref="taxon:10090"
/clone="U00C1M0065016"
/clone_1fb="Mouse 10kb plasmid U00C1M library"
/sex="Male"
/lab_host="E. coli strain XL10-Gold, T1-resistant, p-"

Mouse "Vector: pMD19, Purified genomic DNA from M. musculus C57BL/6J (male) was obtained from the Jackson Laboratory Mouse DNA Resource (<http://www.jax.org/research/subcontractors.htm>). The DNA was hydrolyzed and then sheared by repeated passage through a 0.065 inch orifice at constant velocity. The sheared DNA was blunt end-repaired with T4 DNA polymerase and T4 polynucleotide kinase. Adaptor oligonucleotides were ligated to the blunt ends in both molar excess. The adaptor DNA was purified and size selected for a 9.5 to 10.5 kb range using preparative agarose gel electrophoresis. Vector DNA was prepared from a derivative of pMD19 (1117321143E/AT12927.1), a 3887 number inducible derivative of pBluescript II. The vector was ligated with adaptors complementary to the insert adaptors and purified. The sheared adaptor mouse DNA was annealed to adaptor vector DNA, and transformed into chemically competent *E. coli* XL10-Gold (Stratagene) cells and selected for ampicillin resistance."

BASE COUNT 14 a 4 c 1 g 12 t
ORIGIN

Query Match 0.4% Score 14 DB 13 Length 40
Best local similarity 100.0% Pred. No. 24005
Matches 14: Conservative 0; Mismatches 0; Indels 0; Gaps 0

QY 4064 attattattatt 4077
|||||
DB 25 ATTATTATTATT 12

RESULT 29
ACCESSION BC668047 32 bp mRNA EST 40 APR 2001
DEFINITION BC668047 Rat 10kb library rat10b rat10b genomic DNA clone BC668047
mRNA sequence.
ACCESSION BC668047
VERSION BC668047.1 GI:11889969
KEYWORDS EST
SOURCE Norway rat,
ORGANISM Rattus norvegicus
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae;
Rattus;
1 (bases 1 to 18)
AUTHORS Xiao, H., Fan, H., Chen, F., Xu, H., Huang, S., Fan, Y., Li, P., Liu, P., Gao,
J., Gao, C., Yan, Q., Jiang, X., Zhu, Z., Xu, X., Li, N., Chen, Z., and
Zhang, X.
TITLE distinct gene expression profiles of rat dorsal root ganglion
induced by peripheral nerve axotomy
JOURNAL
COMMENT Published (2001)
Contact: Zhang Xu
Laboratory of Sensory System
Institute of Neurobiology
420 Yue Yang Road, Shanghai 200041, P.R. China
Tel.: 86-21-64724870-121
Fax: 86-21-64721446
Email: xu.zhang@ion.ac.cn
This clone is also available at Chinese National Human Genome
Center at Shanghai, 451 Guo Sheng Road, Shanghai Hi-Tech Park,
Pudong New Area, P.R. China. Please contact with Zhang Xu
(xuzhang@ion.ac.cn) or Han Zengjun (hanzeng@ion.ac.cn)
PCR primers
FORWARD: T3
REVERSE: T7
BACKWARD: T7
Seq primer: T3
polyA-No.

FEATURES
Source location/Qualifiers
1..18
/organism="Rattus norvegicus"
/strain="Sprague-Dawley"
/db_xref="taxon:10116"

of pMD42 (q1147221143/AF129672.1), a copy number
inducible derivative of plasmid p1. The vector was ligated
with adaptors complementary to the insert adaptors and
purified. The shored, adaptor mouse DNA was annealed to
adaptor vector DNA, and transformed into
chemically-competent *E. coli* XL10-Gold (Stratagene) cells
and selected for ampicillin resistance.

BASE COUNT
ORIGIN
0 a 10 c 0 g 9 t

Query Match
Best Local Similarity 100.0%; Pred. No. 7,1e+05;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1153 aqagaqagaqaga 1165
DB 18 AGAGAGAGAGAGA 6

RESULT 32
AC510952 19 bp DNA GSS 07-06-2000
LOCUS 1M355615R Mouse 10kb plasmid insert library Mus musculus genomic
DEFINITION clone JMGCM0355015 R. DNA sequence.
ACCESSION AC510952.1 GI:136722268
VERSION AC510952.1
KEYWORDS GSS.
SOURCE house mouse.
ORGANISM Mus musculus

REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
Mammalia: Metazoa; Chordata; Vertebrata; Euteleostomi;
Furcata; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
1 (bases 1 to 19)
Islam, H., Longacre, S., Mahmoud, M., Memon, F., Pedersen, T., Kelly,
M., Rose, M., Rose, R., Stokes, R., Tenny, A., von Niederhausern, A.
and Wright, D., Weiss, R.
Mouse whole genome scaffolding with paired end reads from 10kb
plasmid inserts
Unpublished (2000)
Contact: Robert B. Weiss
University of Utah Genome Center
Pm. 308, Biomedical Polymers Research Bldg., 20 S. 2000 E., StG, UT
84112, USA
Tel: 801 585 5606
Fax: 801 585 7177
Email: ddunn@genetics.utah.edu
Insert length: 10000 Std Error: 0.00
Plate: 0355 row: G column: 15
Seq primer: CACACGCAACACGATATACG
Class: plasmid ends
High quality sequence stop: 19.

FEATURES

source
1. 19
Location/Qualifiers

/organism="Mus musculus"
/strain="C57BL/6J"
/db_xref="taxon:10090"
/clone="JMGCM0355015"
/accession="AC510952.1"
/sex="Male"
/lab_host="E. coli strain XL10-Gold, T1-resistant, F"
/note="Vector: pMD42ny; Purified genomic DNA from M.
musculus C57BL/6J (male) was obtained from the Jackson
Laboratory Mouse DNA Resource
(http://www.jax.org/resources/mouseDNAResource/). The DNA
was hydrolyzed by repeated passage through a
0.005 inch orifice at constant velocity. The sheared DNA
was blunt end repaired with T4 DNA polymerase and T4
polynucleotide kinase. Adaptor oligonucleotides were
ligated to the blunt ends in high molar excess. The
adaptor DNA was purified and size selected for a 9.5 to
10.5 kb range using preparative agarose gel

BASE COUNT
ORIGIN
0 a 9 c 0 g 10 t

Query Match
Best Local Similarity 100.0%; Pred. No. 7,1e+05;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1153 aqagaqagaqaga 1165
DB 19 AGAGAGAGAGAGA 7

RESULT 33
AC510952 19 bp DNA GSS 27-APR-2001
LOCUS 1M355615R Mouse 10kb plasmid insert library Mus musculus genomic
DEFINITION clone JMGCM0355015 R. DNA sequence.
ACCESSION AC510952.1 GI:136722268
VERSION AC510952.1
KEYWORDS GSS.
SOURCE house mouse.
ORGANISM Mus musculus

REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
Mammalia: Metazoa; Chordata; Vertebrata; Euteleostomi;
Furcata; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
1 (bases 1 to 19)
Islam, H., Longacre, S., Mahmoud, M., Memon, F., Pedersen, T., Kelly,
M., Rose, M., Rose, R., Stokes, R., Tenny, A., von Niederhausern, A.
and Wright, D., Weiss, R.
Mouse whole genome scaffolding with paired end reads from 10kb
plasmid inserts
Unpublished (2000)
Contact: Robert B. Weiss
University of Utah Genome Center
Pm. 308, Biomedical Polymers Research Bldg., 20 S. 2000 E., StG, UT
84112, USA
Tel: 801 585 5606
Fax: 801 585 7177
Email: ddunn@genetics.utah.edu
Insert length: 10000 Std Error: 0.00
Plate: 0264 row: H column: 02
Seq primer: CCGTGAACACGACGACGACG
Class: plasmid ends
High quality sequence stop: 19.

FEATURES

source
1. 19
Location/Qualifiers

/organism="Mus musculus"
/strain="C57BL/6J"
/db_xref="taxon:10090"
/clone="JMGCM0355015"
/accession="AC510952.1"
/sex="Female"
/lab_host="E. coli strain XL10-Gold, T1-resistant, F"
/note="Vector: pMD42ny; Purified genomic DNA from M.
musculus C57BL/6J (female) was obtained from the Jackson
Laboratory Mouse DNA Resource
(http://www.jax.org/resources/mouseDNAResource/). The DNA
was hydrolyzed by repeated passage through a
0.005 inch orifice at constant velocity. The sheared DNA
was blunt end repaired with T4 DNA polymerase and T4
polynucleotide kinase. Adaptor oligonucleotides were
ligated to the blunt ends in high molar excess. The
adaptor DNA was purified and size selected for a 9.5 to
10.5 kb range using preparative agarose gel

10-5 kb range using preparative agarose gel electrophoresis. Vector DNA was prepared from a derivative of pMD22 (q1147211414b/AT129072.1), a copy number induction derivative of plasmid p1. The vector was ligated with adaptors complementary to the insert adaptors and purified. The sheared, adaptor mouse DNA was annealed to chemically competent E. coli XL10-gold (Stratagene) cells and selected for ampicillin resistance.

BASE COUNT
0 a 9 c 1 g 9 t

Query Match 0.4% Score 143 DB 13 Length 192
Post Local Similarity 100.0% Prod. No. 7.1e+05
Matches 13 Conservative 0 Mismatches 0 Indels 0 Gaps 0

QY 1153 aaaaagagagaga 1165
|||||
DB 19 ACACACACACACAC 7

RESULT 44
AZ43566/c 20 bp DNA GSS 03 OCT 2000
LOCUS 1M02196702R Mouse 10kb plasmid 100821M library Mus musculus genomic
DEFINITION cDNA 1M02196702R, cDNA sequence.
ACCESSION AZ43566
KEYWORDS GSS: GI:10666247
VERSION AZ43566.1 GI:10666247
SOURCE house mouse;
ORGANISM Mus musculus
Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus;
1 (bases 1 to 20)

REFERENCE
AUTHORS Iman,D., Aoyagi,A., Barber,M., Beavert,T., Inval,B., Hamli,C.,
Islam,H., Jandaghi,S., Mahmood,M., Monon,E., Pederson,T., Reilly,
M., Rose,M., Rose,R., Stokes,R., Tilley,A., von Nischhausen,A.,
and Wright,D.,Weiss,R.
TITLE Mouse whole genome scaffolding with paired end reads from 10kb
plasmid inserts
JOURNAL Unpublished (2000)
COMMENT Contact: Robert B. Weiss
University of Utah Genome Center
Room 408, Biomedical Polymers Research Bldg., 20 S. 2030 E., Salt, UT
84112, USA
Tel: 801 585 5606,
Fax: 801 585 7177
Email: dmon@genome.utah.edu
Insert Length: 10000 Std Error: 0.00
Plate: 0219 row: c column: 02
Seq primer: GATCAGCAAAATGACTATATGC
Class: plasmid ends
High quality sequence steps: 20
Location/Qualifiers
1..20
/organism "Mus musculus"
/strain "c278.76"
/clone "1M02196702R"
/contig "1M02196702R"
/sex "Male"
/lab host "E. coli strain XL10 gold, 11 resistant, F"
/note "Vector: pMD2007, purified genomic DNA from M.
musculus c278.76 (male) was obtained from the Jackson
Laboratory Mouse DNA Resource
(http://www.jax.org/mouse-dna-resource/). The DNA
was hydrolyzed by sheared by repeated passage through a
0.005 inch orifice at constant velocity. The sheared DNA
was blunt end repaired with T4 DNA polymerase and T4
polynucleotide kinase. Adaptor oligonucleotides were
ligated to the blunt ends in both vector cassettes. The

BASE COUNT
0 a 10 c 0 g 10 t

Query Match 0.4% Score 143 DB 13 Length 203
Post Local Similarity 100.0% Prod. No. 7.1e+05
Matches 13 Conservative 0 Mismatches 0 Indels 0 Gaps 0

QY 1153 aaaaagagagaga 1165
|||||
DB 20 ACACACACACACAC 8

RESULT 45
AZ492997/c 20 bp DNA GSS 05 OCT 2000
LOCUS 1M02278240R Mouse 10kb plasmid 100821M library Mus musculus genomic
DEFINITION cDNA 1M02278240R, cDNA sequence.
ACCESSION AZ492997
KEYWORDS GSS: GI:10666247
VERSION AZ492997.1 GI:10666247
SOURCE house mouse;
ORGANISM Mus musculus
Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus;
1 (bases 1 to 20)

REFERENCE
AUTHORS Iman,D., Aoyagi,A., Barber,M., Beavert,T., Inval,B., Hamli,C.,
Islam,H., Jandaghi,S., Mahmood,M., Monon,E., Pederson,T., Reilly,
M., Rose,M., Rose,R., Stokes,R., Tilley,A., von Nischhausen,A.,
and Wright,D.,Weiss,R.
TITLE Mouse whole genome scaffolding with paired end reads from 10kb
plasmid inserts
JOURNAL Unpublished (2000)
COMMENT Contact: Robert B. Weiss
University of Utah Genome Center
Room 408, Biomedical Polymers Research Bldg., 20 S. 2030 E., Salt, UT
84112, USA
Tel: 801 585 5606,
Fax: 801 585 7177
Email: dmon@genome.utah.edu
Insert Length: 10000 Std Error: 0.00
Plate: 0427 row: R column: 2A
Seq primer: GATTGTAATAATGAGGAAATTC
Class: plasmid ends
High quality sequence steps: 20
Location/Qualifiers
1..20
/organism "Mus musculus"
/strain "c278.76"
/clone "1M02278240R"
/contig "1M02278240R"
/sex "Male"
/lab host "E. coli strain XL10 gold, 11 resistant, F"
/note "Vector: pMD2007, purified genomic DNA from M.
musculus c278.76 (male) was obtained from the Jackson
Laboratory Mouse DNA Resource
(http://www.jax.org/mouse-dna-resource/). The DNA
was hydrolyzed by sheared by repeated passage through a
0.005 inch orifice at constant velocity. The sheared DNA
was blunt end repaired with T4 DNA polymerase and T4
polynucleotide kinase. Adaptor oligonucleotides were

BASE COUNT
0 a 10 c 0 g 10 t

Query Match 0.4% Score 143 DB 13 Length 203
Post Local Similarity 100.0% Prod. No. 7.1e+05
Matches 13 Conservative 0 Mismatches 0 Indels 0 Gaps 0

QY 1153 aaaaagagagaga 1165
|||||
DB 20 ACACACACACACAC 8

RESULT 45
AZ492997/c 20 bp DNA GSS 05 OCT 2000
LOCUS 1M02278240R Mouse 10kb plasmid 100821M library Mus musculus genomic
DEFINITION cDNA 1M02278240R, cDNA sequence.
ACCESSION AZ492997
KEYWORDS GSS: GI:10666247
VERSION AZ492997.1 GI:10666247
SOURCE house mouse;
ORGANISM Mus musculus
Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus;
1 (bases 1 to 20)

[illegible][illegible]

was hydrolytically sheared by repeated passage through a 0.005 inch orifice at constant velocity. The sheared DNA was blunt end repaired with 14 DNA polymerase and 14 polynucleotide kinase. Adaptor oligonucleotides were ligated to the blunt ends in high molar excess. The adaptor DNA was purified and size selected for a 9.5 to 10.5 kb range using preparative agarose gel electrophoresis. Vector DNA was prepared from a derivative of pMD42 (3147321141b/AP12072.1), a copy number inducible derivative of plasmid p1. The vector was ligated with adaptors complementary to the insert adaptors and purified. The sheared, adaptor mouse DNA was annealed to adaptor vector DNA, and transformed into chemically-competent E. coli XL10 Gold (Stratagene) cells and selected for ampicillin resistance.

BASE COUNT
ORIGIN

4 a 12 c 0 g 5 t

Query Match

Best Local Similarity 100.0% Prod. No. 7.1e+05
Matches 133 Conservative 0 Mismatches 0 Indels 0 Gaps 0

QY 2155 ctctctctccctc 2167
|||||

DB 7 ctctctctccctc 19

RESULT 40

AZ394897

LOCUS

DEFINITION

ACCESSION

VERSION

KEYWORDS

SOURCE

ORGANISM

REFERENCE

AUTHORS

JOURNAL

COMMENT

TITLE

Plasmid inserts

Mouse whole genome scaffolding with paired end reads from 10kb

Unpublished (2000)

Contact: Robert B. Weiss

University of Utah

Genome Center

Box 308, Biomedical Polymers Research Bldg., 20 S. 2000 E., Ste. 01

84112, USA

Tel: 801 585 5606

Fax: 801 585 7177

Email: ddunne@genetics.utah.edu

Insert length: 10000 Std Error: 0.00

Plate: 0158 row: H column: 11

Seq primer: CACACAGCAACACCTATGACC

Class: plasmid ends
High quality sequence slope: 21
Location/Qualifiers
1. .21
/organism="Mus musculus"
/strain="C57BL/6J"
/db_xref="taxon:10090"
/clone="M0343819"
/clone_lib="Mouse 10kb plasmid M0343819 library"
/sex="Male"
/lab_host="E. coli strain XL10-gold, TI-resistant, F"
/note="Vector: pMD42nt; purified genomic DNA from the musculus C57BL/6J (m10c) was obtained from the Jackson Laboratory Mouse Resource

was hydrolytically sheared by repeated passage through a 0.005 inch orifice at constant velocity. The sheared DNA was blunt end repaired with 14 DNA polymerase and 14 polynucleotide kinase. Adaptor oligonucleotides were ligated to the blunt ends in high molar excess. The adaptor DNA was purified and size selected for a 9.5 to 10.5 kb range using preparative agarose gel electrophoresis. Vector DNA was prepared from a derivative of pMD42 (3147321141b/AP12072.1), a copy number inducible derivative of plasmid p1. The vector was ligated with adaptors complementary to the insert adaptors and purified. The sheared, adaptor mouse DNA was annealed to adaptor vector DNA, and transformed into chemically-competent E. coli XL10-gold (Stratagene) cells and selected for ampicillin resistance.

BASE COUNT
ORIGIN

0 a 10 c 0 g 11 t

Query Match

Best Local Similarity 100.0% Prod. No. 7.1e+05
Matches 133 Conservative 0 Mismatches 0 Indels 0 Gaps 0

QY 1154 atagagagagagag 1165
|||||

DB 21 AGAGAGAGAGAGAGA 9

RESULT 41

AZ504574

LOCUS

DEFINITION

ACCESSION

VERSION

KEYWORDS

SOURCE

ORGANISM

REFERENCE

AUTHORS

JOURNAL

COMMENT

TITLE

Plasmid inserts

Mouse whole genome scaffolding with paired end reads from 10kb

Unpublished (2000)

Contact: Robert B. Weiss

University of Utah

Genome Center

Box 308, Biomedical Polymers Research Bldg., 20 S. 2000 E., Ste. 01

84112, USA

Tel: 801 585 5606

Fax: 801 585 7177

Email: ddunne@genetics.utah.edu

Insert length: 10000 Std Error: 0.00

Plate: 0143 row: H column: 19

Seq primer: CATTGTAAGAACTAGGATGAT

Class: plasmid ends
High quality sequence slope: 21
Location/Qualifiers
1. .21
/organism="Mus musculus"
/strain="C57BL/6J"
/db_xref="taxon:10090"
/clone="M0343819"
/clone_lib="Mouse 10kb plasmid M0343819 library"
/sex="Male"
/lab_host="E. coli strain XL10-gold, TI-resistant, F"
/note="Vector: pMD42nt; purified genomic DNA from the musculus C57BL/6J (m10c) was obtained from the Jackson Laboratory Mouse Resource

Mon Apr 22 08:35:21 2002

us-09-824-322b-1.rst

Query	Match	Similarity	Score	DB	Length	Index	Gaps
Post-Lateral	13	0.48	100.0%	7	105	0	0
Matches	13	Conservative	0	Mismatches	0		
QY	1797	11111111111111111111	1809				
DB	14	11111111111111111111					
	14	TTTTTCTTTTCTTCTC	2				

Search completed: April 120, 2002, 05:17:42
Job time: 6879 sec

GenCore version 4.5
Copyright (c) 1993 GenCore Software Ltd.

OM nucleic - nucleic search, using SW model

Run on: April 20, 2002, 03:28:08 ; Search time 122.62 seconds

(without alignments)
6711.964 Million cell updates/sec

Title: US-09-824-322b-1

Perfect score: 3634

Sequence: 1 gaattccatgagattcaat.....attccaaatttgaattcc 3644

Scoring table: OIJO_NUC

Gapop 60 0, Gapext 60 0

Searched: 351203 seqs, 113238999 residues

Word size: 0

Total number of hits satisfying chosen parameters: 362754

Minimum DB seq length: 0

Maximum DB seq length: 30

Post-processing: Listing first 45 summaries

Database: Issued Patents_NA:
1: /cgn2_1/1013/22_001/FA_01_MP_seq *
2: /cgn2_1/1013/22_001/FA_02_MP_seq *
3: /cgn2_1/1013/22_001/FA_03_MP_seq *
4: /cgn2_1/1013/22_001/FA_04_MP_seq *
5: /cgn2_1/1013/22_001/FA_05_MP_seq *
6: /cgn2_1/1013/22_001/FA_06_MP_seq *

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No	Score	Query Match length	DB ID	Description
1	30	0.8	30	US-09-176-862-1
2	30	0.8	30	US-09-176-862-18
3	29	0.8	29	US-09-444-503-22
4	29	0.8	29	US-09-176-862-1
5	29	0.8	29	US-09-176-862-10
6	28	0.8	28	US-08-444-503-4
7	28	0.8	28	US-09-176-862-2
8	27	0.7	27	US-09-444-503-26
9	27	0.7	27	PCT-0594-10057-10
10	26	0.7	26	US-08-444-503-17
11	26	0.7	26	US-08-444-503-25
12	26	0.7	26	US-09-176-862-2
13	26	0.7	26	US-09-176-862-9
14	26	0.7	26	US-09-176-862-11
15	26	0.7	26	US-09-176-862-12
16	26	0.7	26	US-09-176-862-25
17	26	0.7	26	US-09-176-862-25
18	25	0.7	25	US-09-166-186-45
19	25	0.7	25	US-09-113-932-15
20	25	0.7	25	US-09-149-922-56
21	25	0.7	25	US-09-176-862-6
22	25	0.7	25	US-09-176-862-14
23	24	0.7	24	US-07-647-6550-15
24	24	0.7	24	US-07-647-6550-16
25	24	0.7	24	US-08-444-503-3
26	24	0.7	24	US-08-732-498-4
27	24	0.7	24	US-08-859-998-15

1	28	21	0.7	21	US-09-859-998-46	Sequence 46, Appl
2	29	24	0.7	24	US-09-176-862-8	Sequence 8, Appl
3	33	21	0.7	21	US-09-176-862-15	Sequence 15, Appl
4	31	24	0.7	24	US-09-176-862-27	Sequence 27, Appl
5	32	24	0.7	24	US-09-176-862-28	Sequence 28, Appl
6	34	24	0.6	24	US-08-444-503-9	Sequence 9, Appl
7	34	24	0.6	24	PCT-0594-10057-10	Sequence 10, Appl
8	35	24	0.6	24	US-09-176-862-14	Sequence 14, Appl
9	36	22	0.6	22	US-07-794-490-24	Sequence 24, Appl
10	37	22	0.6	22	US-08-041-648-14	Sequence 14, Appl
11	38	22	0.6	22	US-08-217-529-6	Sequence 6, Appl
12	39	22	0.6	22	US-08-444-503-15	Sequence 15, Appl
13	40	22	0.6	22	US-08-444-503-28	Sequence 28, Appl
14	41	22	0.6	22	US-08-732-498-4	Sequence 4, Appl
15	42	22	0.6	22	US-08-859-998-15	Sequence 15, Appl
16	43	22	0.6	22	US-08-474-851-46	Sequence 46, Appl
17	44	22	0.6	22	US-08-444-503-46	Sequence 46, Appl
18	45	22	0.6	22	US-09-166-186-44	Sequence 44, Appl

ALIGNMENTS

RESULT 1

US-09-176-862-1/0

Sequence 1, Application US/09176862B

Patent No. 6046319

GENERAL INFORMATION:

APPLICANT: Power, Christopher

INVENTOR: Power, Christopher

INVENTOR: Power, Christopher

INVENTOR: Power, Christopher

INVENTOR: Power, Christopher

INVENTOR: Power, Christopher

INVENTOR: Power, Christopher

INVENTOR: Power, Christopher

INVENTOR: Power, Christopher

INVENTOR: Power, Christopher

INVENTOR: Power, Christopher

INVENTOR: Power, Christopher

INVENTOR: Power, Christopher

INVENTOR: Power, Christopher

INVENTOR: Power, Christopher

INVENTOR: Power, Christopher

INVENTOR: Power, Christopher

INVENTOR: Power, Christopher

INVENTOR: Power, Christopher

INVENTOR: Power, Christopher

US-09-176-862-1

Sequence 1, Application US/09176862B

Patent No. 6046319

GENERAL INFORMATION:

APPLICANT: Power, Christopher

INVENTOR: Power, Christopher

INVENTOR: Power, Christopher

INVENTOR: Power, Christopher

INVENTOR: Power, Christopher

INVENTOR: Power, Christopher

INVENTOR: Power, Christopher

INVENTOR: Power, Christopher

INVENTOR: Power, Christopher

INVENTOR: Power, Christopher

INVENTOR: Power, Christopher

INVENTOR: Power, Christopher

INVENTOR: Power, Christopher

```

1  SEQ ID NO: 18
2  LENGTH: 40
3  TYPE: DNA
4  ORGANISM: Artificial Sequence
5  FEATURE:
6  OTHER INFORMATION: Description of Artificial Sequence: Synthesized
7  OS: 09-176.862.18

```

Query Match	0.84	Score	40	D8	3	Length	30
Host Local Similarity	100.0%	Prod. No.	0.00045				
Matches	30	Conservative	0	Mismatches	0	Indels	

City	1970	1980	1990	2000	2010
100	100	100	100	100	100
90	90	90	90	90	90
80	80	80	80	80	80
70	70	70	70	70	70
60	60	60	60	60	60
50	50	50	50	50	50
40	40	40	40	40	40
30	30	30	30	30	30
20	20	20	20	20	20
10	10	10	10	10	10
0	0	0	0	0	0

RESULT 3
US-08-44503-42
Sequence 32, Application US/0844503

1 APPLICANT: SOAM M. Sullivan
2 APPLICANT: Kenneth G. Draper
3 TITLE OF INVENTION: METHOD AND REAGENT FOR

NUMBER OF SEQUENCES: 54
CORRESPONDENCE ADDRESS:
ADDRESS: LYON 6 LYON
COUNTRY: FRANCE

STATE: California
COUNTRY: USA
ZIP: 90017

- 1. COMPUTER: IBM compatible
- 2. OPERATING SYSTEM: IBM MS-DOS (Version 5.0)
- 3. SOFTWARE: WordPerfect (Version 5.1)

```

1  FILING DATE: 04 MAY 1995
2  CLASSIFICATION: 435
3  PRIOR APPLICATION DATA:
4  APPLICATION NUMBER: IN 09 2008 805

```

APPLICANT NUMBER: 00/989,849
FILING DATE: December 7, 1992
ATTORNEY/AGENT INFORMATION:
NAME: Wilbur, Richard L.

REFERENCE/BOOK NUMBER: 200/276
TELECOMMUNICATION INFORMATION:
TELEPHONE: (213) 489-1600
TELEFAX: (213) 955-0440

1	SEQUENCE CHARACTERISTICS:	321
2	INFORMATION FOR SEQ ID NO:	322
3	LENGTH: 29	
4	TYPE: nucleic acid	

US-08 434-503-32

Match	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
Match	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
Match	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
Match	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
Match	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
Match	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
Match	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52																																																

1 GATTCGAUGGUGAGGACCGGCTTUGGTTAA 29

RESULT 4
US-09-176-862-4/c
Sequence 4, Application US/09176862B

APPLICANT: Power, Christopher
; APPLICANT: Mayo, Michael B.
; TITLE OF INVENTION. ANTISENSE

SUBMITTED DATE: 1998-10-22
 CURRENT FILING DATE: 1998-10-22
 EARLIER APPLICATION NUMBER: 60/062,718

```

; SOFTWARE: Patent In Ver. 2.0
; SFO ID NO 4
; LENGTH: 29

```

OTHER INFORMATION: Description of Artificial Sequence: synthetic

Only Match	0.8%	Score	29	DB	3	Length	29
Local Similarity	100.0%	Picard, No.	0.00099				
Post-Local Similarity	0	Missatches					
Conceptual	0	Indels					
		Gaps					

11b 29 GTATCAAGGCTCTGGCCAGGCACTCA; 11b

US-09176-862-10/c
Shogunco, Inc. Application US/09176862P
Patent No. 6046319

1 APPLICANT: Mayo, Michael B.
2
3 TITLE OF INVENTION: ANTISENSE OLIGONUCLEOTIDES REGULATING EXPRESSION
4
5 TITLE OF INVENTION, IF TWO-ALPHA
6
7 FILING REFERENCE: 2005/00007

CURRENT FILING DATE: 1998-10-22
 EARLIER APPLICATION NUMBER: 60/062,718
 EARLIER FILING DATE: 1997-10-22
 NUMBER OF SEQ. ID NOS.: 33

```

? SEQ ID NO 10
?
? LENGTH: 29
?
? TYPE: DNA
?
? ORGANISM: Artificial Sequence

```

OTHER INFORMATION: Description of material acquired
US-09-176-862-10

Match	Player	Score	W/L	Draw	Points	Rank
1	White	1-0	1	0	1	1
2	Black	0-1	0	1	0	2
3	White	1-0	1	0	2	1
4	Black	0-1	0	1	1	3
5	White	1-0	1	0	3	1
6	Black	0-1	0	1	2	4
7	White	1-0	1	0	4	1
8	Black	0-1	0	1	3	5
9	White	1-0	1	0	5	1
10	Black	0-1	0	1	4	6
11	White	1-0	1	0	6	1
12	Black	0-1	0	1	5	7
13	White	1-0	1	0	7	1
14	Black	0-1	0	1	6	8
15	White	1-0	1	0	8	1
16	Black	0-1	0	1	7	9
17	White	1-0	1	0	9	1
18	Black	0-1	0	1	8	10
19	White	1-0	1	0	10	1
20	Black	0-1	0	1	9	11
21	White	1-0	1	0	11	1
22	Black	0-1	0	1	10	12
23	White	1-0	1	0	12	1
24	Black	0-1	0	1	11	13
25	White	1-0	1	0	13	1
26	Black	0-1	0	1	12	14
27	White	1-0	1	0	14	1
28	Black	0-1	0	1	13	15
29	White	1-0	1	0	15	1
30	Black	0-1	0	1	14	16
31	White	1-0	1	0	16	1
32	Black	0-1	0	1	15	17
33	White	1-0	1	0	17	1
34	Black	0-1	0	1	16	18
35	White	1-0	1	0	18	1
36	Black	0-1	0	1	17	19
37	White	1-0	1	0	19	1
38	Black	0-1	0	1	18	20
39	White	1-0	1	0	20	1
40	Black	0-1	0	1	19	21
41	White	1-0	1	0	21	1
42	Black	0-1	0	1	20	22
43	White	1-0	1	0	22	1
44	Black	0-1	0	1	21	23
45	White	1-0	1	0	23	1
46	Black	0-1	0	1	22	24
47	White	1-0	1	0	24	1
48	Black	0-1	0	1	23	25
49	White	1-0	1	0	25	1
50	Black	0-1	0	1	24	26
51	White	1-0	1	0	26	1
52	Black	0-1	0	1	25	27
53	White	1-0	1	0	27	1
54	Black	0-1	0	1	26	28
55	White	1-0	1	0	28	1
56	Black	0-1	0	1	27	29
57	White	1-0	1	0	29	1
58	Black	0-1	0	1	28	30
59	White	1-0	1	0	30	1
60	Black	0-1	0	1	29	31
61	White	1-0	1	0	31	1
62	Black	0-1	0	1	30	32
63	White	1-0	1	0	32	1
64	Black	0-1	0	1	31	33
65	White	1-0	1	0	33	1
66	Black	0-1	0	1	32	34
67	White	1-0	1	0	34	1
6						

RESULT 6

```

Sequence 4, Application US-08434503
Patent No. 5616490
GENERAL INFORMATION:
APPLICANT: Sean M. Sullivan
APPLICANT: Kenneth G. Draper
TITLE OF INVENTION: METHOD AND REAGENT FOR
TITLE OF INVENTION: TREATMENT OF INFLAMMATORY
DISEASE
NUMBER OF SEQUENCES: 54
CORRESPONDENCE ADDRESS:
ADDRESS: Lyon & Lyon
STREET: 611 West Sixth Street
CITY: Los Angeles
STATE: California
COUNTRY: USA
ZIP: 90017
COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb storage
COMPUTER: IBM compatible
OPERATING SYSTEM: IBM MS DOS (Version 5.0)
SOFTWARE: WordPerfect (Version 5.1)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US-08/434,503
FILING DATE: 04-MAY-1995
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/008,895
FILING DATE: 19-JAN-1994
APPLICATION NUMBER: 07/989,849
FILING DATE: December 7, 1992
ATTORNEY/AGENT INFORMATION:
NAME: Marburg, Richard J.
REGISTRATION NUMBER: 32,327
REFERENCE/POCKET NUMBER: 200/276
TELECOMMUNICATION INFORMATION:
TELEPHONE: (213) 489-1600
TELEFAX: (213) 955-0440
TELEX: 67-3510
SEQUENCE CHARACTERISTICS:
INFORMATION FOR SFO ID NO: 4:
LENGTH: 28
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
US-08-434-503-4

Query Match 0.88: Score 28; DB 1; Length 28;
Best Local Similarity 89.38; Pred. No. 0.0028;
Matches 25, Conservative 2, Mismatches 0, Indels 0, Gaps 0.

CY 709 CAGATCGCTGAGCGAGCGAGCGAGCGAG 736
DB 1 CACACCCCGGACAGGAGGCGAGGAG 28

RESULT 7
US-09-176-862-4:
Sequence 3, Application US-09176862B
Patent No. 6046419
GENERAL INFORMATION:
APPLICANT: Power, Christopher
APPLICANT: Mayo, Michael B.
TITLE OF INVENTION: ANTISENSE OF GENE EXPRESSION LINES REGULATING EXPRESSION
TITLE OF INVENTION: OF TNF-ALPHA
FILE REFERENCE: 3045.00002
CURRENT APPLICATION NUMBER: US-09/176,862B
CURRENT FILING DATE: 1998-10-23
EARLIER APPLICATION NUMBER: 60/052,718
EARLIER FILING DATE: 1997-10-22
NUMBER OF SFO ID NOS: 33
SOFTWARE: PatentIn Ver. 2.0
SFO ID NO 3

```

```

LENGTH: 40
TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Description of Artificial Sequence: synbio
US-09-176-862-4

Query Match 0.88: Score 28; DB 1; Length 40;
Best Local Similarity 100.00; Pred. No. 0.0028;
Matches 28, Conservative 0, Mismatches 0, Indels 0, Gaps 0.

CY 954 TGGATGATCGCTGAGCGAGCGAGCGAG 961
DB 30 TCGATGATCGCTGAGCGAGCGAG 4

RESULT 8
US-08-434-503-26
Sequence 26, Application US-08/434503
Patent No. 5616490
GENERAL INFORMATION:
APPLICANT: Sean M. Sullivan
APPLICANT: Kenneth G. Draper
TITLE OF INVENTION: METHOD AND REAGENT FOR
TITLE OF INVENTION: TREATMENT OF INFLAMMATORY
DISEASE
NUMBER OF SEQUENCES: 54
CORRESPONDENCE ADDRESS:
ADDRESS: Lyon & Lyon
STREET: 611 West Sixth Street
CITY: Los Angeles
STATE: California
COUNTRY: USA
ZIP: 90017
COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb storage
COMPUTER: IBM compatible
OPERATING SYSTEM: IBM MS DOS (Version 5.0)
SOFTWARE: WordPerfect (Version 5.1)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US-08/434,503
FILING DATE: 04-MAY-1995
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/008,895
FILING DATE: 19-JAN-1994
APPLICATION NUMBER: 07/989,849
FILING DATE: December 7, 1992
ATTORNEY/AGENT INFORMATION:
NAME: Marburg, Richard J.
REGISTRATION NUMBER: 32,327
REFERENCE/POCKET NUMBER: 200/276
TELECOMMUNICATION INFORMATION:
TELEPHONE: (213) 489-1600
TELEFAX: (213) 955-0440
TELEX: 67-3510
SEQUENCE CHARACTERISTICS:
INFORMATION FOR SFO ID NO: 26:
LENGTH: 27
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
US-08-434-503-26

Query Match 0.78: Score 27; DB 1; Length 27;
Best Local Similarity 91.85; Pred. No. 0.0085;
Matches 22, Conservative 5, Mismatches 0, Indels 0, Gaps 0.

CY 293 AGATCTATCTATGAGATGAGCGAGT 294
DB 1 AGATCTATCTATGAGATGAGCGAGT 27

```

RESULT 9

PCT US94 10957 10/6

Sequence 10, Application US/0844503

GENERAL INFORMATION:

APPLICANT: Goldstein, Harriet; Kollmann, Tobias R.

TITLE OF INVENTION: Immunodeficient Mouse Models of Pathogenesis of Human Disease and Efficacy and Toxicity of

NUMBER OF SEQUENCES: 28

CORRESPONDENCE ADDRESS:

ADDRESS: Law Office of Sherman and Shalloway

STREET: 418 N. Washington Street

CITY: Alexandria

STATE: Virginia

COUNTRY: USA

ZIP: 22314

COMPUTER READABLE FORM:

MEDIUM TYPE: Diskette, 5.25 inch, 460 kb storage

COMPUTER: IBM clone, 486 Turbo

OPERATING SYSTEM: MS-DOS 5.0

SOFTWARE: Word Perfect, Version 5.1

CURRENT APPLICATION DATA:

APPLICATION NUMBER: PCT/US94/10957

FILING DATE:

CLASSIFICATION:

ATTORNEY/AGENT INFORMATION:

NAME: Richard A. Stotholt

REGISTRATION NUMBER: 26,588

REFERENCE/CKET NUMBER: 1994/011

TELECOMMUNICATION INFORMATION:

TELEPHONE: (703) 549-2282

TELEFAX: (703) 836-0106

INFORMATION FOR SEQ ID NO: 10:

SEQUENCE CHARACTERISTICS:

LENGTH: 27 nucleotides

TYPE: nucleic acid

STRANDEDNESS: single

TOPOLOGY: linear

MOLECULE TYPE: cDNA

HYDROPHETIC: no

ORGANISM: human

FEATURE:

NAME/KEY: 4' TNP-

PCT US94 10957 10

Query Match

Post Local Similarity 100.0% Score 27: 100 % Length 27:

Matches 27: Conserved 0: Mismatches 0: Indels 0: Gaps 0:

DB 27 AGCAAGTCAAGTCTCTGATGAC 1

RESULT 10

US 08 444 503 17

Sequence 17, Application US/0844503

Patent No. 5616490

GENERAL INFORMATION:

APPLICANT: Kenneth G. Draper

TITLE OF INVENTION: METHOD AND REAGENT FOR

TITLE OF INVENTION: TREATMENT OF INFLAMMATORY

NUMBER OF SEQUENCES: 54

CORRESPONDENCE ADDRESS:

ADDRESSEE: Lyon & Lyon

STREET: 611 West Sixth Street

CITY: Los Angeles

STATE: California

COUNTRY: USA

ZIP: 90017

COMPUTER READABLE FORM:

MEDIUM TYPE: 3.5" Diskette, 1.44 Mb storage

COMPUTER: IBM compatible

OPERATING SYSTEM: IBM MS-DOS (Version 5.0)

SOFTWARE: WordPerfect (Version 5.1)

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/444 503

FILING DATE: 04-MAY-1995

CLASSIFICATION: 435

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 08/2908,895

FILING DATE: 19-JAN-1993

APPLICATION NUMBER: 07/989,849

FILING DATE: December 7, 1992

ATTORNEY/AGENT INFORMATION:

NAME: Whitford, Richard J.

REGISTRATION NUMBER: 42,327

REFERENCE/CKET NUMBER: 500,776

TELECOMMUNICATION INFORMATION:

TELEPHONE: (213) 489-1600

TELEFAX: (213) 955-0440

INFORMATION FOR SEQ ID NO: 17:

SEQUENCE CHARACTERISTICS:

LENGTH: 26

TYPE: nucleic acid

STRANDEDNESS: single

TOPOLOGY: linear

US-08-434-503-17

Query Match

Post Local Similarity 84.6% Score 26: 100 % Length 26:

Matches 22: Conserved 4: Mismatches 0: Indels 0: Gaps 0:

DB 1 GCAAGTCAAGTCTCTGATGAC 26

RESULT 11

US 08 434 503 25

Sequence 25, Application US/0844503

Patent No. 5616490

GENERAL INFORMATION:

APPLICANT: Kenneth G. Draper

TITLE OF INVENTION: METHOD AND REAGENT FOR

TITLE OF INVENTION: TREATMENT OF INFLAMMATORY

NUMBER OF SEQUENCES: 54

CORRESPONDENCE ADDRESS:

ADDRESSEE: Lyon & Lyon

STREET: 611 West Sixth Street

CITY: Los Angeles

STATE: California

COUNTRY: USA

ZIP: 90017

COMPUTER READABLE FORM:

MEDIUM TYPE: 3.5" Diskette, 1.44 Mb storage

COMPUTER: IBM compatible

OPERATING SYSTEM: IBM MS-DOS (Version 5.0)

SOFTWARE: WordPerfect (Version 5.1)

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/444 503

FILING DATE: 04-MAY-1995

CLASSIFICATION: 435

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 08/2908,895

FILING DATE: 19-JAN-1993

APPLICATION NUMBER: 07/969,949
 FILING DATE: December 7, 1992
 ATTORNEY/AGENT INFORMATION:
 NAME: Warburg, Richard J.
 REGISTRATION NUMBER: 32,327
 REFERENCE/DOCKET NUMBER: 200/276
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (213) 489-1600
 TELEFAX: (213) 955-0440
 TELEX: 67-3510
 INFORMATION FOR SEQ ID NO. 25:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 26
 TYPE: nucleic acid
 STRANDEDNESS: single
 TOPOLOGY: linear
 US-09-434-503-25

Query Match 0.7%; Score 26; DB 1; Length 26;
 Best Local Similarity 80.8%; Pred. No. 0.023;
 Matches 21; Conservative 5; Mismatches 0; Indels 0; Gaps 0;

07 2897 tggcagaaagctgcagctgactgga 2922
 :|||||||:|||||||:|||||||:|||||||:
 DB 1 tggcagaaagctgcagctgactgga 26

RESULT 12
 US-09-176-862-2/2
 Sequence 12: Application US/09176862B
 Patent No. 6046319
 GENERAL INFORMATION:
 APPLICANT: Power, Christopher
 TITLE OF INVENTION: ANTISENSE TO HEPG2 XMRV1 GENE EXPRESSION
 FILE REFERENCE: 3045.00002
 CURRENT APPLICATION NUMBER: US/09/176,862B
 CURRENT FILING DATE: 1998-10-22
 EARLIER APPLICATION NUMBER: 60/062,718
 EARLIER FILING DATE: 1997-10-22
 NUMBER OF SEQ ID NOS: 33
 SOFTWARE: PatentIn Ver. 2.0
 SEQ ID NO 2
 LENGTH: 26
 TYPE: DNA
 ORGANISM: Artificial Sequence
 FEATURE:
 OTHER INFORMATION: Description of Artificial Sequence: synthetic
 US-09-176-862-2

Query Match 0.7%; Score 26; DB 3; Length 26;
 Best Local Similarity 100.0%; Pred. No. 0.023;
 Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

07 873 ctccagcagctgcttcttctcagc 898
 :|||||||:|||||||:|||||||:|||||||:
 DB 26 ctccagcagctgcttcttctcagc 1

RESULT 13
 US-09-176-862-9/2
 Sequence 9: Application US/09176862B
 Patent No. 6046319
 GENERAL INFORMATION:
 APPLICANT: Power, Christopher
 APPLICANT: Mayne, Michael B.
 TITLE OF INVENTION: ANTISENSE TO HEPG2 XMRV1 GENE EXPRESSION
 FILE REFERENCE: 3045.00002
 CURRENT APPLICATION NUMBER: US/09/176,862B

CURRENT FILING DATE: 1998-10-22
 EARLIER APPLICATION NUMBER: 60/062,718
 EARLIER FILING DATE: 1997-10-22
 NUMBER OF SEQ ID NOS: 33
 SOFTWARE: PatentIn Ver. 2.0
 SEQ ID NO 9
 LENGTH: 26
 TYPE: DNA
 ORGANISM: Artificial Sequence
 FEATURE:
 OTHER INFORMATION: Description of Artificial Sequence: synthetic
 US-09-176-862-9

Query Match 0.7%; Score 26; DB 3; Length 26;
 Best Local Similarity 100.0%; Pred. No. 0.023;
 Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

07 2216 ccagagccctcttgcagctgctgga 2241
 :|||||||:|||||||:|||||||:|||||||:
 DB 26 ccagagccctcttgcagctgctgga 1

RESULT 14
 US-09-176-862-11/2
 Sequence 11: Application US/09176862B
 Patent No. 6046319
 GENERAL INFORMATION:
 APPLICANT: Power, Christopher
 TITLE OF INVENTION: ANTISENSE TO HEPG2 XMRV1 GENE EXPRESSION
 FILE REFERENCE: 3045.00002
 CURRENT APPLICATION NUMBER: US/09/176,862B
 CURRENT FILING DATE: 1998-10-22
 EARLIER APPLICATION NUMBER: 60/062,718
 EARLIER FILING DATE: 1997-10-22
 NUMBER OF SEQ ID NOS: 33
 SOFTWARE: PatentIn Ver. 2.0
 SEQ ID NO 11
 LENGTH: 26
 TYPE: DNA
 ORGANISM: Artificial Sequence
 FEATURE:
 OTHER INFORMATION: Description of Artificial Sequence: synthetic
 US-09-176-862-11

Query Match 0.7%; Score 26; DB 3; Length 26;
 Best Local Similarity 100.0%; Pred. No. 0.023;
 Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

07 835 gaggagagctccagagagagag 860
 :|||||||:|||||||:|||||||:|||||||:
 DB 26 gaggagagctccagagagagag 1

RESULT 15
 US-09-176-862-12/2
 Sequence 12: Application US/09176862B
 Patent No. 6046319
 GENERAL INFORMATION:
 APPLICANT: Power, Christopher
 APPLICANT: Mayne, Michael B.
 TITLE OF INVENTION: ANTISENSE TO HEPG2 XMRV1 GENE EXPRESSION
 FILE REFERENCE: 3045.00002
 CURRENT APPLICATION NUMBER: US/09/176,862B
 CURRENT FILING DATE: 1998-10-22
 EARLIER APPLICATION NUMBER: 60/062,718
 EARLIER FILING DATE: 1997-10-22
 NUMBER OF SEQ ID NOS: 33
 SOFTWARE: PatentIn Ver. 2.0

```

1 SEQ ID NO: 12
2 LENGTH: 26
3 TYPE: DNA
4 ORGANISM: Artificial Sequence
5 FEATURE:
6 OTHER INFORMATION: Description of Artificial Sequence:synthetic
US 09 176 862 12

```

```

Query Match          0.78; Score 26; DB 4; Length 26;
Post Local Similarity 100.0%; Prod. No. 0.0243
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

UY 845 1cccccaaaagcagagagagagag 870
DB 26 1cccccaaaagcagagagagagag 1

```

```

RESULT 16
US 09 176 862 142
1 Sequence 15, Application US/09176862B
2 Patent No. 6046319
3 GENERAL INFORMATION:
4 APPLICANT: Isomet, Christopher
5 APPLICANT: Mayne, Michael R.
6 TITLE OF INVENTION: ANTISENSE OF PROTEIN SYNTHETIC DEGRADATION EXPRESSION
7 FILE OF INVENTION: OF INF ALPHA
8 FILE REFERENCE: 6045,00002
9 CURRENT APPLICATION NUMBER: 09/091768,862B
10 CURRENT FILING DATE: 1998 10 22
11 EARLIER APPLICATION NUMBER: 60/0662,71B
12 EARLIER FILING DATE: 1997 10 22
13 NUMBER OF SEQ ID NOS: 34
14 SOFTWARE: Patent In Ver. 2.0
15 SEQ ID NO: 15
16 LENGTH: 26
17 TYPE: DNA
18 ORGANISM: Artificial Sequence
19 FEATURE:
20 OTHER INFORMATION: Description of Artificial Sequence:synthetic
US 09 176 862 15

```

```

Query Match          0.78; Score 26; DB 4; Length 26;
Post Local Similarity 100.0%; Prod. No. 0.0243
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

UY 855 4cccccaaaagcagagagagagag 880
DB 26 4cccccaaaagcagagagagagag 1

```

```

RESULT 17
US 09 149 922 55
1 Sequence 55, Application US/09149922A
2 Patent No. 6256174
3 GENERAL INFORMATION:
4 APPLICANT: Isomet, Christopher
5 APPLICANT: Mayne, Michael R.
6 TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR IDENTIFYING AND MODULATING
7 TITLE OF INVENTION: PROTEIN PROTEIN INTERACTIONS
8 FILE REFERENCE: 9366,006
9 CURRENT APPLICATION NUMBER: 09/091499,922A
10 CURRENT FILING DATE: 1998 09 09
11 EARLIER APPLICATION NUMBER: 60/064,058
12 EARLIER FILING DATE: 1997 11 03
13 NUMBER OF SEQ ID NOS: 97
14 SOFTWARE: Patent In Ver. 2.0
15 SEQ ID NO: 55
16 LENGTH: 26
17 TYPE: DNA
18 ORGANISM: Artificial Sequence

```

```

1 FEATURE:
2 OTHER INFORMATION: Description of Artificial Sequence: primer
US 09 149 922 55

```

```

Query Match          0.78; Score 26; DB 4; Length 26;
Post Local Similarity 100.0%; Prod. No. 0.0243
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

UY 776 1cccccaaaagcagagagagagag 801
DB 1 1cccccaaaagcagagagagagag 26

```

```

RESULT 18
US 09 166 186 45
1 Sequence 45, Application US/09166186A
2 Patent No. 6080580
3 GENERAL INFORMATION:
4 APPLICANT: Baker, Brenda
5 APPLICANT: Bennett, C. Frank
6 APPLICANT: Butler, Madeline M.
7 APPLICANT: Shandhan, William R.
8 TITLE OF INVENTION: ANTISENSE OLIGONUCLEOTIDES MODULATION OF THE EXPRESSION
9 FILE REFERENCE: ISPO 03422
10 CURRENT APPLICATION NUMBER: 09/091661,186A
11 CURRENT FILING DATE: 1998 10 05
12 NUMBER OF SEQ ID NOS: 250
13 SEQ ID NO: 45
14 LENGTH: 25
15 TYPE: DNA
16 ORGANISM: Artificial Sequence
17 FEATURE:
18 OTHER INFORMATION: PCR probe
US 09 166 186 45

```

```

Query Match          0.78; Score 25; DB 4; Length 25;
Post Local Similarity 100.0%; Prod. No. 0.0643
Matches 25; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

UY 900 cttctctctctctctctctctctctct 924
DB 1 cttctctctctctctctctctctctct 25

```

```

RESULT 19
US 09 313 942 45
1 Sequence 45, Application US/09313942A
2 Patent No. 6228642
3 GENERAL INFORMATION:
4 APPLICANT: Baker, Brenda
5 APPLICANT: Bennett, C. Frank
6 APPLICANT: Butler, Madeline M.
7 APPLICANT: Shandhan, William R.
8 TITLE OF INVENTION: ANTISENSE OLIGONUCLEOTIDES MODULATION OF THE
9 FILE REFERENCE: ISPO 0346
10 CURRENT APPLICATION NUMBER: 09/093139,942A
11 CURRENT FILING DATE: 1999 05 18
12 NUMBER OF SEQ ID NOS: 501
13 SEQ ID NO: 45
14 LENGTH: 25
15 TYPE: DNA
16 ORGANISM: Artificial Sequence
17 FEATURE:
18 OTHER INFORMATION: PCR probe
US 09 313 942 45

```

```

Query Match          0.78; Score 25; DB 4; Length 25;
Post Local Similarity 100.0%; Prod. No. 0.0643
Matches 25; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```


COUNTRY: U.S.A.
 ZIP: 77010 4095
 COMPUTER READABLE FORM:
 MEDIUM TYPE: DISK, 3.5 inch (1.44MB)
 COMPUTER: IBM PC/AT
 OPERATING SYSTEM: MS-DOS
 SOFTWARE: BASIC
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US-07/647,655C
 FILING DATE: 19910131
 CLASSIFICATION: 435
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER:
 FILING DATE:
 ATTORNEY/AGENT INFORMATION:
 NAME: THOMAS D. PAUL
 REGISTRATION NUMBER: 42,714
 REFERENCE/BOOKET NUMBER: D-5217
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (713) 651-5325
 TELEFAX: (713) 651-5246
 TELEX: WESTERN UNION 762429
 INFORMATION FOR SEQ ID NO: 15:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 24
 TYPE: NUCLEIC ACID
 STRANDEDNESS: Single
 TOPOLOGY: Linear
 MOLECULE TYPE: Genomic DNA
 US-07-647-655C-15

Query Match 0.78; Score 24; LH 1; Length 24;
 Best Local Similarity 100.0%; Prev. No. 0.18;
 Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

UY 1171 gggagagagatgctgagatg 1194
 |||
 DB 1 ggaatagagagagagagagatg 24

RESULT 24
 US-07-647-655C-16/C
 Sequence 16, Application US/07647655C
 Patent No. 5,464,759
 GENERAL INFORMATION:
 APPLICANT: Albert O. Edwards and
 APPLICANT: Charles Thomas Caskey
 TITLE OF INVENTION: DNA profiling with short
 TITLE OF INVENTION: tandem repeat polymorph. base and identification of polymorphic
 NUMBER OF SEQUENCES: 26
 CORRESPONDENCE ADDRESS:
 ADDRESSEE: Pulidotti & Jaworski Patent Department
 STREET: 1401 McKinney, Suite 5100
 CITY: Houston
 STATE: Texas
 COUNTRY: U.S.A.
 ZIP: 77010 4095
 COMPUTER READABLE FORM:
 MEDIUM TYPE: DISK, 3.5 inch (1.44MB)
 COMPUTER: IBM PC/AT
 OPERATING SYSTEM: MS-DOS
 SOFTWARE: BASIC
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US-07/647,655C
 FILING DATE: 19910131
 CLASSIFICATION: 435
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER:
 FILING DATE:
 ATTORNEY/AGENT INFORMATION:
 NAME: THOMAS D. PAUL

REGISTRATION NUMBER: 42,714
 REFERENCE/BOOKET NUMBER: D-5217
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (713) 651-5325
 TELEFAX: (713) 651-5246
 TELEX: WESTERN UNION 762429
 INFORMATION FOR SEQ ID NO: 16:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 24
 TYPE: NUCLEIC ACID
 STRANDEDNESS: Single
 TOPOLOGY: Linear
 MOLECULE TYPE: Genomic DNA
 US-07-647-655C-16

Query Match 0.78; Score 24; LH 1; Length 24;
 Best Local Similarity 100.0%; Prev. No. 0.18;
 Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

UY 1456 tatgacgtcagagagagatg 1479
 |||
 DB 24 tatgacgtcagagagagatg 1

RESULT 25
 US-08-434-503-3
 Sequence 3, Application US/08434503
 Patent No. 5616490
 GENERAL INFORMATION:
 APPLICANT: Sean M. Sullivan
 APPLICANT: Kenneth G. Draper
 TITLE OF INVENTION: METHOD AND REAGENT FOR
 TITLE OF INVENTION: TREATMENT OF INFLAMMATORY
 TITLE OF INVENTION: DISEASE
 NUMBER OF SEQUENCES: 54
 CORRESPONDENCE ADDRESS:
 ADDRESSEE: Lyon & Lyon
 STREET: 611 West Sixth Street
 CITY: Los Angeles
 STATE: California
 COUNTRY: USA
 ZIP: 90017
 COMPUTER READABLE FORM:
 MEDIUM TYPE: 3.5" Diskette, 1.44 Mb storage
 COMPUTER: IBM compatible
 OPERATING SYSTEM: IBM MS-DOS (Version 5.0)
 SOFTWARE: Wordperfect (Version 5.1)
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US-08/434,503
 FILING DATE: 04-MAY-1995
 CLASSIFICATION: 435
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US-08/008,895
 FILING DATE: 19-JAN-1994
 APPLICATION NUMBER: 07/989,849
 FILING DATE: December 7, 1992
 ATTORNEY/AGENT INFORMATION:
 NAME: Waldorf, Richard J.
 REGISTRATION NUMBER: 42,427
 REFERENCE/BOOKET NUMBER: 209/276
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (213) 489-1600
 TELEFAX: (213) 955-0440
 TELEX: 67-4510
 INFORMATION FOR SEQ ID NO: 43:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 24
 TYPE: nucleic acid
 STRANDEDNESS: single
 TOPOLOGY: linear
 US-08-434-503-3

Query Match 0.78; Score 24; DB 1; Length 24;
Best Local Similarity 91.74; Pred. No. 0.18;
Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 685 cccctgaacacacccacacgc 708
|||||:|||||:|||||:|||||
DB 1 cccctgaacacacccacacgc 24

RESULT 26

US-08-732-398-4/c
Sequence 4, Application US/08732398
Patent No. 5980911
GENERAL INFORMATION:
APPLICANT: Corner, Leigh A.
APPLICANT: Rothel, James S.
APPLICANT: Seow, Heng F.
APPLICANT: Wood, Paul R.
APPLICANT: McWaters, Peter
TITLE OF INVENTION: AN ADJUVANT
NUMBER OF SEQUENCES: 12
CORRESPONDENCE ADDRESS:
ADDRESSEE: SCHILLY, SCOTT, MURPHY & PRESSEP
STREET: 400 Garden City Plaza
CITY: Garden City
STATE: New York
COUNTRY: United States
ZIP: 11530
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentlib Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/732,398
FILING DATE: 11-FEB-1997
CLASSIFICATION: 514
ATTORNEY/AGENT INFORMATION:
NAME: Digiqllo, Frank S.
REGISTRATION NUMBER: 31,346
REFERENCE/WORK NUMBER: 10356
TELECOMMUNICATION INFORMATION:
TELEPHONE: (516) 742-4343
TELEFAX: (516) 742-4366
FAX: 230 901 SANS NP
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 24 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)
US-08-732-398-4

Query Match 0.78; Score 24; DB 2; Length 24;
Best Local Similarity 100.0%; Pred. No. 0.18;
Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2569 taclttggatcattgcctatga 2592
|||||:|||||:|||||:|||||
DB 24 taclttggatcattgcctatga 1

RESULT 27

US-08-859-998-45
Sequence 45, Application US/08859998
Patent No. 5994076
GENERAL INFORMATION:
APPLICANT: Chenchik, Alex
APPLICANT: Jokhadze, George
APPLICANT: Bibilashvili, Robert

TITLE OF INVENTION: METHOD OF ASSAYING DIFFERENTIAL
NUMBER OF SEQUENCES: 1375
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson, P.C.
STREET: 2200 Sand Hill Road, Suite 100
CITY: Menlo Park
STATE: CA
COUNTRY: US
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM compatible
OPERATING SYSTEM: Windows95
SOFTWARE: FASTSEQ for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/859,998
FILING DATE: 21-MAY-1997
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Field, Bret E.
REGISTRATION NUMBER: 37,620
REFERENCE/WORK NUMBER: 59036, 702001
TELEPHONE: 415-422-5070
TELEFAX: 415-854-0875
FAX: 415-854-0875
INFORMATION FOR SEQ ID NO: 45:
SEQUENCE CHARACTERISTICS:
LENGTH: 24 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: DNA
FEATURE:
OTHER INFORMATION: oligonucleotide primer
US-08-859-998-45

Query Match 0.78; Score 24; DB 2; Length 24;
Best Local Similarity 100.0%; Pred. No. 0.18;
Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2345 taactaacacacacacacacac 2368
|||||:|||||:|||||:|||||
DB 1 taactaacacacacacacacac 24

RESULT 28

US-08-859-998-46/c
Sequence 46, Application US/08859998
Patent No. 5994076
GENERAL INFORMATION:
APPLICANT: Chenchik, Alex
APPLICANT: Jokhadze, George
APPLICANT: Bibilashvili, Robert
TITLE OF INVENTION: METHOD OF ASSAYING DIFFERENTIAL
NUMBER OF SEQUENCES: 1375
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson, P.C.
STREET: 2200 Sand Hill Road, Suite 100
CITY: Menlo Park
STATE: CA
COUNTRY: US
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM compatible
OPERATING SYSTEM: Windows95
SOFTWARE: FASTSEQ for Windows Version 2.0

RESULT 40
US 09 176 862 15/c
Sequence 15, Application US/09176862P
Patent No. 6046319

```

1 RESULT: 42
2 US-09-176-862-28/c
3 : Sequence 28, Application US/09176862H
4 : Patent No. 604619
5
6 : GENERAL INFORMATION:
7
8 APPLICANT: Power, Christopher
9
10 APPLICANT: Mayo, Michael B.
11
12 TITLE OF INVENTION: ANTI-SENSE OF 1010030XMYNO1140T11255 RESULTING EXPRESSION
13
14 TITLE OF INVENTION: OF THE ALPHA

```



```

1  APPLICANT:  Power, Christopher
2  APPLICANT:  Mayo, Michael R.
3  TITLE OF INVENTION:  ANTISENSE TO POLYDEOXYRIBOTIDES  REGULATING EXPRESSION
4  TITLE OF INVENTION:  OF TNF-ALPHA
5  FILE REFERENCE:  904,000,012
6  CURRENT APPLICATION NUMBER:  US7/021,705, 80,218
7  CURRENT FILING DATE:  1998-10-22
8  EARLIER APPLICATION NUMBER:  60/096,271B
9  EARLIER FILING DATE:  1997-10-22
10 NUMBER OF SEQ ID NOS: 33
11 SOFTWARE:  Patatoin Ver. 2.0
12 SEQ ID NO: 14
13 LENGTH: 26
14 TYPE: DNA
15 ORGANISM:  Artificial Sequence
16 FEATURE:
17 OTHER INFORMATION:  Description of Artificial Sequence: synbio
18 US 09 176-862.14

```


Db 1 GCTCTGCTGAGGATGCGCTG 22

RESULT 38

US-08-217-529-6

Sequence 6, Application US/08217529

PATENT No. 5597899

GENERAL INFORMATION:

APPLICANT: Hanner, David

APPLICANT: Lesslauer, Werner

APPLICANT: Lotscher, Hansruedi

APPLICANT: Stuber, Dietrich

TITLE OF INVENTION: Tumor Necrosis Factor Mutations

NUMBER OF SEQUENCES: 7

CORRESPONDENCE ADDRESS:

ADDRESSEE: George M. Gould, Esq., Holtmann-Ja Roche Inc.

STREET: 340 Kingsland Street

CITY: Nutley

STATE: New Jersey

COUNTRY: U.S.

ZIP: 07110

COMPUTER READABLE FORM:

MEDIUM TYPE: FILE, 1st

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Protein Relibase #1 0, Version #1 05

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/217,529

FILING DATE: 24-MAR-1994

CLASSIFICATION: 530

PRIOR APPLICATION DATA:

APPLICATION NUMBER: EP 93810224.1

FILING DATE: 29-MAR-1993

ATTORNEY/AGENT INFORMATION:

NAME: Roseman, Catherine R

REGISTRATION NUMBER: 34240

REFERENCE/DOCKET NUMBER: 4105/155

TELECOMMUNICATION INFORMATION:

TELEPHONE: (201) 235-6208

TELEFAX: (201) 235-6500

INFORMATION FOR SEQ ID NO: 6:

SEQUENCE CHARACTERISTICS:

LENGTH: 22 base pairs

TYPE: nucleic acid

STRANDEDNESS: single

TOPOLOGY: linear

MOLECULE TYPE: DNA (genomic)

HYPOTHETICAL: NO

ANTI-SENSE: NO

ORIGINAL SOURCE:

ORGANISM: Primat 29, Mpc2

US-08-217-529-6

Query Match 0.68, Score 22, DB 1, Length 22

Best Local Similarity 100.0%; Pctd. No. 1.5

Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0

QY 2554 gagctctgagagctctctcttgc 2575

Db 1 GAGCTCTGAGGATGCGCTG 22

RESULT 39

US-08-434-503-15

Sequence 15, Application US/08434503

PATENT No. 5616490

GENERAL INFORMATION:

APPLICANT: Sean M. Sullivan

APPLICANT: Kenneth G. Draper

TITLE OF INVENTION: METHOD AND REAGENT FOR

TREATMENT OF INFLAMMATORY

TITLE OF INVENTION: DISEASE

NUMBER OF SEQUENCES: 54

CORRESPONDENCE ADDRESS:

ADDRESSEE: Lyon & Lyon

STREET: 611 West Sixth Street

CITY: Los Angeles

STATE: California

COUNTRY: USA

ZIP: 90017

COMPUTER READABLE FORM:

MEDIUM TYPE: 3.5" Diskette, 1.44 Mb storage

COMPUTER: IBM compatible

OPERATING SYSTEM: IBM MS-DOS (Version 5.0)

SOFTWARE: WordPerfect (Version 5.1)

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/434,503

FILING DATE: 04-MAY-1995

CLASSIFICATION: 435

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 08/008,895

FILING DATE: 19-JAN-1993

APPLICATION NUMBER: 07/989,849

FILING DATE: December 7, 1992

ATTORNEY/AGENT INFORMATION:

NAME: Warburg, Richard J.

REGISTRATION NUMBER: 32,327

REFERENCE/DOCKET NUMBER: 2002/276

TELECOMMUNICATION INFORMATION:

TELEPHONE: (213) 489-1600

TELEFAX: (213) 955-0440

INFORMATION FOR SEQ ID NO: 15:

SEQUENCE CHARACTERISTICS:

LENGTH: 22

TYPE: nucleic acid

STRANDEDNESS: single

TOPOLOGY: linear

US-08-434-503-15

Query Match 0.68, Score 22, DB 1, Length 22

Best Local Similarity 96.4%; Pctd. No. 1.5

Matches 19; Conservative 4; Mismatches 0; Indels 0; Gaps 0

QY 2409 tcaagggcgaagctctctctc 2430

Db 1 TCAGGCGTAAAGCTGAGCTG 22

RESULT 40

US-08-434-503-28

Sequence 28, Application US/08434504

PATENT No. 5616490

GENERAL INFORMATION:

APPLICANT: Sean M. Sullivan

APPLICANT: Kenneth G. Draper

TITLE OF INVENTION: METHOD AND REAGENT FOR

TREATMENT OF INFLAMMATORY

DISEASE

NUMBER OF SEQUENCES: 54

CORRESPONDENCE ADDRESS:

ADDRESSEE: Lyon & Lyon

STREET: 611 West Sixth Street

CITY: Los Angeles

STATE: California

COUNTRY: USA

ZIP: 90017

COMPUTER READABLE FORM:

MEDIUM TYPE: 3.5" Diskette, 1.44 Mb storage

COMPUTER: IBM compatible

OPERATING SYSTEM: IBM MS-DOS (Version 5.0)

SOFTWARE: WordPerfect (Version 5.1)

CURRENT APPLICATION DATA:

```

1 APPLICATION NUMBER: US/98/414,503
2 FILING DATE: 04 MAY 1995
3 CLASSIFICATION: 435
4 PRIOR APPLICATION DATA:
5 APPLICATION NUMBER: US 08/008,895
6 FILING DATE: 19 JAN 1993
7 APPLICATION NUMBER: 07/999,849
8 FILING DATE: December 7, 1992
9 ATTORNEY/AGENT INFORMATION:
10 NAME: Watbourg, Richard J.
11 REGISTRATION NUMBER: 42,427
12 REFERENCE TO OTHER NUMBERS: 205,276
13 TELECOMMUNICATION INFORMATION:
14 TELEPHONE: (213) 489 1600
15 TELEFAX: (213) 955-0440
16 TELEX: 67 4510
17 INFORMATION FOR SEQ ID NO: 28:
18 SEQUENCE CHARACTERISTICS:
19 LENGTH: 22
20 TYPE: nucleic acid
21 STRANDEDNESS: single
22 TOPOLOGY: linear
23 US 08 434 503 28

```

```

Query Match      0.64: Score 22: DB 1: Length 22:
Post Local Similarity 45.54: Prod. No. 1.5:
Matches 10: Conserved 1: Mismatches 0: Indels 0: Gaps 0:

```

```

DB 1 GCGCTGCTGGCATGAGCTGG 22

```

```

RESULT 41
US 08 437 470 24
1 Sequence 24, Application US/08437470
2 Patent No. 5652454
3 GENERAL INFORMATION:
4 APPLICANT: FLORES, W.
5 APPLICANT: FAVORITO, J.
6 TITLE OF INVENTION: TNF Mutins
7 NUMBER OF SEQUENCES: 24
8 CORRESPONDENCE ADDRESS:
9 ADDRESSEE: Holtmann La Roche Inc.
10 STREET: 440 Kingsland Street
11 CITY: Nutley
12 STATE: New Jersey
13 COUNTRY: USA
14 ZIP: 07110
15 COMPUTER READABLE FORM:
16 MEDIUM TYPE: floppy disk
17 OPERATING SYSTEM: PC DOS/MS-DOS
18 SOFTWARE: Patent In Rel-450 #1.0, Version #1.25
19 CURRENT APPLICATION DATA:
20 APPLICATION NUMBER: US 09 437 470
21 FILING DATE: 01-MAR-1995
22 CLASSIFICATION: 435
23 PRIOR APPLICATION DATA:
24 APPLICATION NUMBER: US 07/794,400
25 FILING DATE: 20-NOV-1991
26 APPLICATION NUMBER: EP 90810901.0
27 FILING DATE: 21-NOV-1993
28 ATTORNEY/AGENT INFORMATION:
29 NAME: KROGALID, WILLIAM
30 REGISTRATION NUMBER: 34256
31 REFERENCE TO OTHER NUMBERS: 4107,196 60
32 TELECOMMUNICATION INFORMATION:
33 TELEPHONE: (201) 245-4407
34 TELEFAX: (201) 245-4500
35 INFORMATION FOR SEQ ID NO: 24:

```

```

1 SEQUENCE CHARACTERISTICS:
2 LENGTH: 22 base pairs
3 TYPE: nucleic acid
4 STRANDEDNESS: single
5 TOPOLOGY: linear
6 MOLECULE TYPE: DNA (collagen nucleotide)
7 FEATURE:
8 NAME/KEY: misc-feature
9 LOCATION: 1..22
10 OTHER INFORMATION: /function: "pork protein"
11 OTHER INFORMATION: /note: "pork protein used in conjunction with seq.
12 OTHER INFORMATION: ID No. 5652454, 22 & 23 to create mutins of TNF alpha
13 US-08-437-470-24

```

```

Query Match      0.64: Score 22: DB 1: Length 22:
Post Local Similarity 100.00: Prod. No. 1.5:
Matches 22: Conserved 0: Mismatches 0: Indels 0: Gaps 0:

```

```

DB 1 GCGCTGCTGGCATGAGCTGG 22

```

```

RESULT 42
US 08-410-654B-46/c
1 Sequence 46, Application US/08410654B
2 Patent No. 5843976
3 GENERAL INFORMATION:
4 APPLICANT: Rene de Waal Malefyt
5 APPLICANT: Di-Bonci Ihsu
6 APPLICANT: Anne O'Garra
7 TITLE OF INVENTION: Use of Interleukin-10 to Treat
8 TITLE OF INVENTION: Herpes Spits
9 NUMBER OF SEQUENCES: 61
10 CORRESPONDENCE ADDRESS:
11 ADDRESSEE: Schering-Plough Corporation
12 STREET: 2000 Gallop Road
13 CITY: Kenilworth
14 STATE: New Jersey
15 COUNTRY: USA
16 ZIP: 07033
17 COMPUTER READABLE FORM:
18 MEDIUM TYPE: floppy disk
19 OPERATING SYSTEM: Macintosh
20 SOFTWARE: Microsoft Word 5.1a
21 CURRENT APPLICATION DATA:
22 APPLICATION NUMBER: US/08/410,654B
23 FILING DATE: 24-MAR-1995
24 CLASSIFICATION: 424
25 PRIOR APPLICATION DATA:
26 APPLICATION NUMBER: US 08/229,854
27 FILING DATE: 19-APR-1994
28 APPLICATION NUMBER: 07 47 26, 853
29 FILING DATE: 06-AUG-1992
30 APPLICATION NUMBER: US 07/742,129
31 FILING DATE: 06-AUG-1991
32 ATTORNEY/AGENT INFORMATION:
33 NAME: Fouliko, Cynthia L.
34 REGISTRATION NUMBER: 42,464
35 REFERENCE TO OTHER NUMBERS: 1802,1K01
36 TELECOMMUNICATION INFORMATION:
37 TELEPHONE: 908-298-2987
38 TELEFAX: 908-298-5488
39 INFORMATION FOR SEQ ID NO: 46:
40 SEQUENCE CHARACTERISTICS:
41 LENGTH: 22 base pairs
42 TYPE: nucleic acid
43 STRANDEDNESS: double
44 TOPOLOGY: linear

```